

Palladium(II) complexes of substituted salicylaldehydes: Synthesis, characterization and investigation of their biological profile

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Supplementary information

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S1 Antioxidant biological assay

The antioxidant activity of the compounds was evaluated *via* their ability to scavenge *in vitro* free radicals such as DPPH and ABTS and to reduce H₂O₂. All the experiments were carried out at least in triplicate and the standard deviation of absorbance was less than 10% of the mean.

S1.1 Determination of the reducing activity of the stable radical DPPH

To an ethanolic solution of DPPH (0.1 mM) an equal volume solution of the compounds (0.1 mM) in ethanol was added. Absolute ethanol was also used as control solution. The absorbance at 517 nm was recorded at room temperature after 30 and 60 min, in order to examine the possible existence of a potential time-dependence of the DPPH radical scavenging activity [S1]. The DPPH-scavenging activity of the compounds was expressed as the percentage reduction of the absorbance values of the initial DPPH solution (DPPH%). NDGA and BHT were used as reference compounds.

S1.2 Assay of radical cation ABTS-scavenging activity

The ABTS assay was performed to determine the activity of the compounds to scavenge the radical cation ABTS. Initially, a water solution of ABTS was prepared (2 mM). ABTS radical cation (ABTS^{•+}) was produced by the reaction of ABTS stock solution with potassium persulfate (0.17 mM) and the mixture was stored in the dark at room temperature for 12–16 h before its use. The ABTS was oxidized incompletely because the stoichiometric reaction ratio of ABTS and potassium persulfate is 1:0.5. The absorbance became maximal and stable only after more than 6 h of reaction although the oxidation of the ABTS started immediately. The radical was stable in this form for more than 2 days when allowed to stand in the dark at room temperature. Afterwards, the ABTS^{•+} solution was diluted in ethanol to an absorbance of 0.70 at 734 nm and 10 µL of diluted compounds or standards (0.1 mM) in DMSO were added. The absorbance was recorded out exactly 1 min after initial mixing [S1]. The ABTS radical scavenging activity was expressed as the percentage inhibition of the absorbance of the initial ABTS solution (ABTS%). Trolox was used as an appropriate standard.

S1.3 Reduction of hydrogen peroxide

The ability of the compounds to reduce hydrogen peroxide (H₂O₂) was estimated according to the method described in the literature [S2]. The reaction mixture contained 20 µL of each of the tested compounds (0.1 mM) and 5 µL H₂O₂ solution (40 mM) in phosphate buffer (50 mM, pH 7.4). The absorbance was measured at 230 nm after 10 min. The antioxidant activity (reduction of

hydrogen peroxide) of the compounds was expressed as the percentage decrease of the initial H_2O_2 solution ($\text{H}_2\text{O}_2\%$). Ascorbic acid (or vitamin C) was used as a standard.

S2 Antibacterial activity

The antimicrobial activity of the compounds was evaluated by determining their respective MIC values towards two Gram–(–) (*Escherichia coli* NCTC 29212 (*E. coli*) and *Xanthomonas campestris* ATCC 1395 (*X. campestris*)) and two Gram–(+) (*Staphylococcus aureus* ATCC 6538 (*S. aureus*) and *Bacillus subtilis* ATCC 6633 (*B. subtilis*)) bacterial species. Cultures of these microbial strains were grown on a rich selective agar medium and stored at 4°C. The selective media used were Nutrient Agar or Broth for *B. subtilis* and *S. aureus*, Yeast Mold Agar or Broth for *X. campestris* and Luria Agar or Broth for *E. coli*. Cells picked from the surface of the stored cultures were used to initiate liquid pre–cultures of the same selective medium at an initial turbidity of roughly 1 McFarland unit. Pre–cultures were incubated for 24 h in a rotary shaking incubator and subsequently they were used to inoculate the test cultures used for the determination of MIC at an initial turbidity of 0.5 McFarland units. The test cultures consisted of Mueller–Hinton broth (Deben Diagnostics Ltd) containing different concentrations of the compounds.

Different concentrations were achieved as follows: the compounds were freshly dissolved in DMSO to a concentration of 1 mg mL^{–1} and they were diluted with DMSO, using the method of progressive double dilution. Therefore, working solutions with decreasing concentrations of the compounds under investigation were achieved. The working solutions were subsequently diluted to the final desired concentration by addition to the growth medium at a proportion of 2:98. MIC values were determined as the lowest concentrations of the tested compounds that inhibited visible growth of each respective organism after a 24 h incubation [S3]. Bacterial growth was determined by measuring the turbidity of appropriately diluted cultures at 600 nm with reference to equally diluted sterile growth medium and the inhibition achieved was calculated by comparing the turbidity of each culture to the average of the turbidity of three non–inhibited cultures. All test cultures were grown in triplicates and for the determination of MIC, growth had to be inhibited in at least two cultures of the triplicate. Incubation temperature at all stages was 37°C except for *X. campestris* that was cultivated at 28°C [S4].

S3 Interaction with CT DNA

The interaction of X-saloH and complexes **1–5** with CT-DNA was investigated by UV-vis spectroscopy, viscosity measurements and fluorescence emission spectroscopy studies.

S3.1 Binding study with CT DNA by UV-vis spectroscopy

UV-vis spectroscopy was used for the evaluation of the interaction of the compounds with CT DNA, and specifically the possible binding modes of the compounds to CT DNA. Control experiments with DMSO were performed and no changes in the spectra of CT DNA were observed.

In order to determine the binding mode, the UV-vis spectra of the compounds were recorded for a constant concentration (10^{-5} – 10^{-4} M) at the corresponding λ_{\max} with increasing concentrations of CT DNA for diverse r ($r = [\text{complex}]/[\text{DNA}]$) values. Effective use of the changes in the absorbance of the UV-vis spectra was made and the DNA-binding constants (K_b , M^{-1}) of the compounds were calculated by the Wolfe-Shimer equation (eq. S1) [S5] and the plots $[\text{DNA}]/(\epsilon_A - \epsilon_f)$ versus $[\text{DNA}]$:

$$\frac{[\text{DNA}]}{(\epsilon_A - \epsilon_f)} = \frac{[\text{DNA}]}{(\epsilon_b - \epsilon_f)} + \frac{1}{K_b(\epsilon_b - \epsilon_f)} \quad (\text{eq. S1})$$

where $[\text{DNA}]$ = the concentration of DNA in base pairs, ϵ_f = the extinction coefficient for the free compound at the corresponding λ_{\max} , $\epsilon_A = A_{\text{obsd}}/[\text{compound}]$ and ϵ_b = the extinction coefficient for the compound in the fully bound form. K_b is given by the ratio of slope to the y intercept in plots $[\text{DNA}]/(\epsilon_A - \epsilon_f)$ versus $[\text{DNA}]$.

S3.2 CT DNA-binding studies by viscosity measurements

The viscosity of DNA (0.1 mM) in buffer solution was measured in the absence and presence of increasing amounts of the compounds. The experiments were executed at room temperature and the measurements are devised in a plot $(\eta/\eta_0)^{1/3}$ versus r , where η = the viscosity of DNA in the presence of the compound, and η_0 = the viscosity of neat DNA in buffer solution.

S3.3 EB-displacement studies

In order to determine and confirm the DNA-binding mode of the compounds, a competitive study with EB as an intercalating marker is performed by fluorescence emission spectroscopy. Therefore, the EB-displacing ability of the compounds from its EB-DNA conjugate was examined.

The DNA-EB adduct was prepared by addition of 20 μM EB and 26 μM CT DNA in buffer solution (150 mM NaCl and 15 mM trisodium citrate at pH 7.0). The potential intercalation of the compounds between the DNA-bases was studied by the addition of a certain amount of the

compound solution into the EB–DNA adduct solution. The influence of the compounds on the EB–DNA solution was monitored through the changes of the fluorescence emission spectra at excitation wavelength (λ_{ex}) at 540 nm [S6]. The tested compounds do not show any significant fluorescence at room temperature in solution or in the presence of DNA, under the same experimental conditions ($\lambda_{\text{ex}} = 540$ nm). Bearing that in mind, the observed quenching of the EB–DNA solution is evidently associated to the displacement of EB from its EB–DNA adduct.

The quenching efficiency (K_{SV}) for each compound was assessed according to the Stern–Volmer equation (eq. S2) [S6]:

$$\frac{I_0}{I} = 1 + k_q \tau_0 [Q] = 1 + K_{\text{SV}} [Q] \quad (\text{eq. S2})$$

where I_0 and I = the fluorescence emission intensities of EB–DNA in the absence and presence of the quencher, respectively, $[Q]$ = the concentration of the quencher (i.e. compounds). K_{SV} is obtained from the Stern–Volmer plots by the slope of the diagram I_0/I *versus* $[Q]$. Taking $\tau_0 = 23$ ns as the fluorescence lifetime of the EB–DNA system [S7], the EB–DNA quenching constants (k_q , in $\text{M}^{-1}\text{s}^{-1}$) of the compounds can be determined according to equation S3:

$$K_{\text{SV}} = k_q \tau_0 \quad (\text{eq. S3})$$

S4 Interaction with serum albumins

S4.1 Study of the affinity for serum albumins

The albumin-binding study for the compounds was carried out by fluorescence emission quenching experiments using BSA (3 μ M) or HSA (3 μ M) in buffer solution (15 mM trisodium citrate and 150 mM NaCl at pH 7.0). The tested compounds were used as quenchers with gradually increasing concentrations to monitor the quenching of the emission intensity of tryptophan residues of BSA at 345 nm or HSA at 340 nm [S6]. The fluorescence emission spectra were recorded between 300–500 nm with excitation wavelength of 295 nm. All the experiments were conducted at room temperature. The fluorescence spectra of the compounds were recorded under the same experimental conditions and presented a low-intensity emission band in the region 395–415 nm. Consequently, the SA fluorescence emission spectra were modified properly, by subtracting the spectra of the compounds, and quantitative studies followed.

The extent of the inner-filter effect can be roughly estimated with the following formula:

$$I_{\text{corr}} = I_{\text{meas}} \times 10^{\frac{\varepsilon(\lambda_{\text{exc}})cd}{2}} \times 10^{\frac{\varepsilon(\lambda_{\text{em}})cd}{2}} \quad (\text{eq. S4})$$

where I_{corr} = corrected intensity, I_{meas} = the measured intensity, c = the concentration of the quencher, d = the cuvette length (1 cm), $\varepsilon(\lambda_{\text{exc}})$ and $\varepsilon(\lambda_{\text{em}})$ = the ε of the quencher at the excitation and the emission wavelength, respectively, as calculated from the UV-vis spectra of the complexes [S8].

The interaction of the quencher (i.e. compounds) with serum albumins [S6] was studied through the Stern-Volmer and Scatchard equations [S6] and corresponding graphs. The values of the respective Stern-Volmer constant K_{SV} (M^{-1}), the quenching constant k_q ($\text{M}^{-1}\text{s}^{-1}$), the SA-binding constant K (M^{-1}) and the number of binding sites per albumin (n) were calculated.

According to Stern-Volmer quenching equation [S6] (eq. S2), where I_0 = the initial tryptophan fluorescence intensity of SA, I = the tryptophan fluorescence intensity of SA after the addition of the quencher, k_q = the quenching rate constants of SA, K_{SV} = the dynamic quenching constant, τ_0 = the average lifetime of SA without the quencher, $[Q]$ = the concentration of the quencher, the Stern-Volmer constant (K_{SV} , M^{-1}) can be obtained by the slope of the diagram I_0/I versus $[Q]$. Taking $\tau_0 = 10^{-8}$ s as fluorescence lifetime of tryptophan in SA [S2], the quenching constant (k_q , $\text{M}^{-1}\text{s}^{-1}$) is calculated from equation S3.

From the Scatchard equation (eq. S5) [S6]:

$$\frac{\Delta I/I_0}{[Q]} = nK - K \frac{\Delta I}{I_0} \quad (\text{eq. S5})$$

where n = the number of binding sites per albumin and K = the SA-binding constant. The K constant (M^{-1}) is calculated from the slope in plots $(\Delta I/I_0)/[Q]$ *versus* $(\Delta I/I_0)$ and n is given by the ratio of y intercept to the slope [S9].

S4.2 Competitive SA-fluorescence studies with warfarin and ibuprofen

The competitive studies with warfarin or ibuprofen (site probes) [S10] were performed by tryptophan fluorescence quenching experiments using a fixed concentration of the BSA and site probes (3 μM) in buffer (containing 15 mM trisodium citrate and 150 mM NaCl at pH 7.0). The fluorescence emission spectra were recorded in the presence of increasing amounts of the compounds as quenchers with an excitation wavelength of 295 nm. The Scatchard equation (eq. 7) [S6] and plots were applied on the corrected SA-fluorescence emission spectra in order to determine the BSA-binding constant of the compounds in the presence of warfarin or ibuprofen.

S5. *In silico* computational methods

S5.1 Molecular modeling and docking calculations

The *in silico* predictive tools that have been employed to study the interaction of the compounds with the selected macromolecules, are Schrödinger, Mercury and PyMol molecular modeling software. The 3D structure of the synthesized complex **1** was generated from its X-ray crystal structure as CIF file. Mercury software (<http://www.ccdc.cam.ac.uk/>) was then used to convert the CIF file to PDB format file. Complexes **2-5** were built with the aid of ChemBioDraw Ultra v. 14.0.0.117 software and their structures were optimized with MM2 energy minimization force field method with the aid of ChemBio3D Ultra v. 14.0.0.117 software suite (Cambridge Soft Corporation). The best, most stable (lowest energy) conformation of the molecular model of the complexes were detected by geometrical optimization in the gas phase, as implemented in the Spartan '14 Molecular Modeling program suite (Spartan '14 v.1.1.4, Wavefunction Inc., Irvine, CA, USA; www.wavefun.com). The structures were initially optimized (via energy minimization) by conformational search using the Monte Carlo method with the MMFF94 molecular mechanics model, included in the Spartan'14 program suite. Geometry optimization (leading to the most stable conformer with the lowest energy) was accomplished via quantum-chemical calculations by utilizing Density functional theory (DFT) computations at B3LYP level of theory with 6-31G*(d,p) basis set to describe the accurate structural and electronic properties of the compounds, implemented by Spartan' 14 program suite.

Molecular docking calculations were carried out on the crystal structure of the following target macromolecules: the crystal structure of CT DNA (PDB entry code 1BNA), *E. coli* and *S. aureus* DNA-gyrase (PDB entry codes 1KZN and 5CDM, respectively), 5-LOX (PDB entry code 6N2W), FLAP (PDB entry code 2Q7M), FLT3 (PDB entry code 6JQR), and JAK2 (PDB entry code 2B7A), to investigate the effect of the complexes on these targets. X-ray crystal structures of CT DNA dodecamer d(CpGpCpGpApApTpTpCpGpCpG) [S11] *E. coli* DNA-gyrase in complex with bound co-crystallized drug chlorobiocin (CBN) [S12], *S. aureus* DNA-gyrase in complex with bound co-crystallized drugs moxifloxacin (MXF) and QPT-1 [S13], 5-LOX bound to redox-type inhibitor nordihydroguaiaretic acid (NDGA) [S14], the integral membrane protein FLAP in complex with leukotriene biosynthesis inhibitors MK-591 and the iodinated analog of MK-591 [S15], FLT3 bound to co-crystallized inhibitor Gilteritinib, and JAK2 bound to co-crystallized inhibitor CMP6, were obtained from the Brookhaven Protein Data Bank (operated by the Research Collaboratory for Structural Bioinformatics, RCSB) [S16-S18]. The crystal structures of *E. coli* and *S. aureus* DNA-gyrase enzymes have been refined at 2.3 Å and 2.5 Å resolution, respectively, while the crystal

structures of 5-LOX bound with NDGA at 2.71 Å resolution, FLAP bound with MK-591 at 4.25 Å resolution, FLT3 at 2.20 Å resolution, and JAK2 at 2.00 Å resolution.

In our studies, molecular docking calculations were performed with Schrödinger modeling suite having the ability for accurate calculations. The Schrödinger software suite contains a broad array of computational chemistry tools. In the procedure for molecular docking with the employment of Schrödinger suite all compounds were sketched and converted into three-dimensional MOL2 files using Schrödinger Release 2020-3 Maestro Version 11.1 and minimized using LigPrep 3.5 [S19] (which can generate a number of structures from each input structure with various ionization states, tautomers, stereochemical characteristics, and ring conformations to eliminate molecules on the basis of various criteria such as molecular weight or specified numbers and types of functional groups with correct chiralities for each successfully processed input structure), and the OPLS3 (Optimized Potential for Liquid Simulations) [S20] force field for the optimization, producing the low-energy isomers of the ligands (Schrödinger, <http://www.schrodinger.com>). Energy minimized 3D molecular structures were generated with the employment of LigPrep run from Maestro utility of the Schrödinger suite. The ligand preparation included 2D-3D conversions, generating variations, correction, verification and optimization of the structures. A preparation of receptor and ligand structures was integrated before the actual docking procedure [S21]. The crystal structures of the proteins were prepared using the Protein Preparation Wizard [S22], in Schrödinger Suite 2020-3 (Schrödinger, LLC, New York, NY) [S22,S23]. Protein was prepared by adding the hydrogen atoms, optimizing hydrogen bonds, removing atomic clashes, adding formal charges to the hetero groups and then optimizing at neutral pH. Missing loops and side chains were prepared using Prime version 3.2 [S24,S25]. Finally, the structure was minimized using OPLS3 force field. Active site of studied proteins was obtained using SiteMap tool (version 3.6, Schrödinger) [S26,S27], which provides a fast and effective means of identifying potential binding pockets of proteins. SiteMap identifies the character of binding sites using novel search and assesses each site by calculating various properties like size, volume, amino acid exposure, enclosure, contact, hydrophobicity, hydrophilicity and donor/acceptor ratio. Receptor grid was generated around the active site for effective binding using Receptor grid generation in the Glide (version 5.9) application of Maestro. Once the receptor grid is generated, the ligands are docked to the proteins using Glide docking tool of Schrödinger (Grid based **L**igand **D**ocking with **E**nergetics) (version 6.8) [S23,S28]. Compounds were docked in the binding site of the proteins using Induced-Fit Docking (IFD) protocol 2020-3 [S28-S30]. The ligand interactions are shown in Ligand interaction tool of Maestro (Schrödinger). Waters were deleted with Maestro, the graphical user interface (GUI) of Schrödinger software, prior to docking. Molecular docking studies were carried out for the best fitted compounds to the model, while the final selection criteria were compounds docking scores and the presence of crucial

interactions for binding to the studied proteins [S31]. The resulting poses were examined manually and the most promising ones were redocked with IFD calculations. Poses that pass the initial screens enter the final stage of the algorithm, which involves evaluation and minimization of a grid approximation to the OPLS-AA non-bonded ligand-receptor interaction energy. Final scoring is then carried out on the energy-minimized poses. By default, Schrödinger's proprietary GlideScore [S28] multi-ligand scoring function is used to score the poses. The rescoring was performed to calculate and improved binding energy calculations with Prime's Molecular Mechanics–Generalized Born Surface Area (MM–GBSA) protocol using VSGB solvation model [S32,S33]. All complexes showed good docking scores reflecting drug-binding affinities with the studied proteins. PyMol Molecular Graphics System (Schrödinger, LLC. version 2.3.5, www.pymol.org) [S34], was used to visualize the molecules and analyze the results of the docking and to construct the molecular models.

The binding interactions of the studied complexes on the crystal structure of the following target macromolecules: CT DNA (PDB: 1BNA), *E. coli* and *S. aureus* DNA–gyrase (PDB: 1KZN and 5CDM, respectively), 5–LOX (PDB: 6N2W), and FLAP (PDB: 2Q7M), are presented in Tables S2–S4.

S5.2 Molecular pharmacokinetic properties, drug-likeness, target proteins and toxicity prediction methods

General pharmacological potential, pharmacokinetic properties and toxicity prediction studies were adopted with the employment of various computational tools.

S5.2.1 Calculation of molecular properties and prediction of drug-likeness

S5.2.1.1 Molecular properties prediction

Physicochemical parameters play a vital role in generation and determination of bioactivity of any compound. Molinspiration, web-based cheminformatics software, was used to explore the various parameters such as miLogP, Topological Polar Surface Area (TPSA), molecular weight (MW), number of atoms, number of O or N, number of OH or NH, number of rotatable bonds, volume, and drug likeness including G-protein-coupled receptors ligand (GPCR), ion channel modulator, kinase inhibitor, and nuclear receptor ligand, and the number of violations to Lipinski's rule. MiLogP (octanol/water partition coefficient) was calculated by the method developed by Molinspiration software as a sum of fragment-based contributions and correction factors and used to predict the permeability of molecule across the cell membrane (Molinspiration Cheminformatics, Nova Ulica, Slovensky Grob, Slovakia, 2012, <http://www.molinspiration.com/>). Method is very robust and is able to process practically all organic, and most organometallic molecules. The fragment

contributions were obtained by fitting a training set of >12,000 mostly drug-like molecules with experimental Log P data. In general, theoretical partition coefficient miLog P show high agreement with experimental partition coefficients (log P_{exp}) [S35] validating the very good prediction quality of the Molinspiration miLog P model and justifying its use in the popular ZINC database for virtual screening of commercially-available compounds. Lipophilicity of a compound is a measure of its lipophilic (or hydrophobic) character. It is expressed by octanol-water partition coefficient (log P), which can be determined either experimentally or it can be calculated theoretically (miLog P denotes theoretical octanol/water partition coefficient calculated by Molinspiration software). A high log P value of a compound, i.e., a compound with high lipophilic character that is predominantly dissolved in lipids, is expected to exhibit increased cell permeability as it would be expected to enter cell membrane through simple diffusion without the need of a transport protein [S36]. Nevertheless, the high lipophilicity of a compound can be associated with increased toxicity. Although there is no strong evidence for this correlation [S37], a highly lipophilic compound may be sequestered by fatty tissue and therefore it will be difficult to excrete leading to its accumulation that will impact systemic toxicity [S38]. Therefore, in order to ensure high cell permeability for a potential drug compound, a moderate (not too high, not too low) log P value is needed. Indeed, it has been shown that drugs with good cell permeability exhibit moderate log P values [S39].

TPSA is calculated based on the methodology published by Ertl et al. [S40] as the sum of fragment-based contributions in which O- and N-centered polar fragments are to be considered and calculated by surface areas that are occupied by oxygen and nitrogen atoms and by hydrogen atoms attached to them. TPSA has been used for characterizing drug absorption, including intestinal absorption, bioavailability, Caco-2 permeability, and blood brain barrier permeability. Method for calculation of molecular volume developed by molinspiration is based on group contributions. Number of rotatable bonds (nrotb) is a simple topological parameter that measures molecular flexibility. It has been shown to be a very good descriptor of absorption and oral bioavailability of drugs [S41]. Rotatable bond is defined as any single non-ring bond, bounded to non-terminal heavy (i.e., non-hydrogen) atom. Amide C–N bonds are not considered because they are having high rotational energy barrier. Computation of volume developed at Molinspiration is based on group contributors. It should be mentioning that although tight binding of a drug molecule to its intended target is very important for high potency, poor cell membrane permeability often translates into poor *in vivo* efficacy. Two critical properties that are related to the cell permeability of a potential drug compound are its hydrogen bonding capacity and its lipophilicity [S42–S44].

S5.2.1.2 Drug-likeness

Drug likeness is a qualitative means of analysis to check whether the given molecule has drug-like properties and it is defined as a complex balance of various molecular properties and structural features which determine whether particular molecule is similar to known drugs that would affect its bioavailability, affinity to proteins, toxicity, and metabolic stability. These properties, mainly hydrophobicity/lipophilicity, electronic distribution, hydrogen bonding characteristics, molecule size, and flexibility and presence of various pharmacophoric features, influence the behavior of a molecule in a living organism, including bioavailability, transport properties, affinity to proteins, reactivity, toxicity, and metabolic stability (Molinspiration Cheminformatics, Nova Ulica, Slovensky Grob, Slovakia, 2012, <http://www.molinspiration.com/>). Through the drug-likeness data, the molecular properties and structure features can be checked with regard to known drugs. There is a number of empirical methods for drug-likeness evaluation of a compound. Lipinski's rule of five (Ro5) [S45], is a rule of thumb to evaluate drug-likeness or determine if a chemical compound with a certain pharmacological or biological activity has chemical properties and physical properties (defined as simple molecular descriptors) that would make it a likely orally active drug in humans (good membrane permeability), based on the observation that most orally administered drugs are relatively small and moderately lipophilic molecules. The rule expresses molecular properties vital for a drug's pharmacokinetics in the human body, including their absorption, distribution, metabolism and elimination (ADME) components of the Lipinski's rule. However, Lipinski specifically states that the Ro5 only holds for compounds that are not substrates for active transporters [S46]. According to Ro5, most "drug-like" molecules have an octanol-water partition coefficient ($\log P$) ≤ 5 [S47], number of hydrogen bond acceptors (HBA) ≤ 10 (nON, nitrogen or oxygen atoms), number of hydrogen bond donors (HBD) ≤ 5 (nOHNH, the total number of nitrogen-hydrogen and oxygen-hydrogen bonds), and molecular weight (MW) ≤ 500 Da. The violation of 2 or more of these conditions predicts a molecule as a non-orally available drug. In general, poor permeation of a compound is more likely to be observed when HBA and HBD of its molecular structure, according to Ro5, exceed the values of 10 and 5, respectively [S48]. Nevertheless, there are many exceptions to this rule since only about 50 % of orally administered new chemical entities actually obey it [S49]. There are many compounds with two or more Ro5 violations being pursued in drug development. The partition coefficient (P) describes the propensity of a neutral (uncharged) compound to dissolve in an immiscible biphasic system of lipid (fats, oils, organic solvents) and water. In simple terms, it measures how much of a solute dissolve in the water portion versus an organic portion. Solutes that are predominantly dissolved in the water layer are called hydrophilic (water liking) and those predominantly dissolved in lipids are lipophilic (lipid liking). The partition coefficient is an important measurement of the physical nature of a substance and thereby a predictor of its behavior in different environments.

Another empirical method to distinguish compounds that are orally active, from those that are not, is given by the Veber's Rule [S41], which uses the number of rotatable bonds and the TPSA of a potential drug molecule, further questioning a 500 molecular weight cutoff. The TPSA and the nrotb have been found to better discriminate between compounds that are orally active and those that are not for a large data set of compounds in the rat. According to Veber's Rule compounds which meet only the two criteria of 10 or fewer rotatable bonds and polar surface area no greater than 140 Å² are predicted to have good oral bioavailability.

Furthermore, according to Ghose filter [S50] the number of all atoms (natoms) should be restricted from 20 to 70.

S5.2.1.3 Bioactivity score

The drug-likeness score of lead molecules and their bioactivity scores are determined with combination of GPCR, ion channel modulator, kinase inhibitor, nuclear receptor ligands, protease inhibitor, and enzyme inhibitor, which has been applied to investigate the efficiency of molecules to qualify for drug development. All the parameters were determined with the aid of Molinspiration drug-likeness score online (www.molinspiration.com). The calculated drug-likeness score of each compound was compared with the specific bodily process of each compound, and the results were compared with Naringenin. For organic molecules the probability is if the bioactivity score is (> 0), then it is active; if (−5.0–0.0), then moderately active; if (< −5.0), then inactive. The larger the value of the bioactivity score is, the higher is the probability of the specific molecule to be active [S51]. If bioactivity score of a molecule is greater than 0.00, has considerable biological activities and score between −0.50 to 0.00 is considered to be moderately active and if value is less than −0.50 it is presumed to be inactive. Drug-likeness may be defined as a complex balance of various molecular properties and structure features which determine whether particular molecule is similar to the known drugs. These properties, mainly hydrophobicity, electronic distribution, hydrogen bonding characteristics, molecule size and flexibility and of course presence of various pharmacophoric features influence the behavior of molecule in a living organism, including bioavailability, transport properties, affinity to proteins, reactivity, toxicity, metabolic stability and many others.

S5.2.2 Prediction of toxicity

Toxicity risk alerts are an indication that the drawn structure may be harmful concerning the risk category specified. However, risk alerts are by no means meant to be a fully reliable toxicity prediction, nor should be concluded from the absence of risk alerts that a particular substance is completely free of any toxic effect. The prediction process relies on a precomputed set of structural fragments that give rise to toxicity alerts in case they are encountered in the structure currently

drawn. These fragment lists were created by rigorously shredding all compounds of the Registry of Toxic Effects of Chemical Substances (RTECS) database known to be active in a certain toxicity class (e.g., mutagenicity). Six types of toxicity data are included: (1) primary irritation; (2) mutagenic effects; (3) reproductive effects; (4) tumorigenic effects; (5) acute toxicity; and (6) other multiple dose toxicity. Specific numeric toxicity values such as LD₅₀, LC₅₀, TDLo, and TCLo are noted as well as species studied and route of administration used.

S5.2.2.1 Acute rat toxicity prediction by GUSAR (on the Basis of PASS Prediction)

In silico prediction of LD₅₀ values for rats with four types of administration (oral, intravenous, intraperitoneal, subcutaneous, inhalation) were calculated with the aid of GUSAR software from the Institute of Biomedical Chemistry (IBMC), Russia [S52-S54]. GUSAR (General Unrestricted Structure-Activity Relationships) software is a tool developed to create models on quantitative structure-activity relationships/quantitative structure-property relationship (QSAR/QSPR) on the basis of the appropriate training sets represented as SD file contained data about chemical structures and endpoint quantitative data on biological activities. The output is a reliable quantitative SAR/SPR (Structure Activity and Property Relationship) model. GUSAR predicts biological activities quantitatively, based on (Q)SAR models, which can also be created with the software. GUSAR has been developed according to OECD principals and includes last achievements in the field of QSAR modeling: consensus prediction, applicability domain assessment, internal and external models validation and clearly interpretations of obtaining results. The GUSAR is a prediction module of PASS (Prediction of Activity Spectra for Substances), predicting whole bioactivity spectra for compounds qualitatively, based only on 2D structural formulae (<http://www.pharmaexpert.ru/GUSAR/AcuToxPredict/>). The training sets were created on the basis of data from SYMYX MDL Toxicity Database. They include the information about ~10000 chemical structures with data on acute rat's toxicity represented on the LD₅₀ values (log₁₀ (mmol/kg)) [S55]. The core of GUSAR consists of a unique algorithm of self-consistent regression allows to select the best set of MNA (Multilevel Neighborhoods of Atoms), biologically-based descriptors calculated on the basis of PASS predictions and QNA (Quantitative Neighborhoods of Atoms) descriptors for a robust and reliable QSAR model. Curated chemical gene interactions data in the training sets were retrieved from the Comparative Toxicogenomics Database (CTD), Mount Desert Island Biological Laboratory, Salisbury Cove, Maine. <http://ctdbase.org/> [July, 2012]. Prediction of toxicity of the studied compounds is facilitated with the calculation of the LD₅₀ values. LD₅₀ value is one of important characteristics of acute toxicity that corresponds to the dose causing 50% mortality (median lethal dose) within 24 hours of administration. Acute oral, dermal and inhalation rodent toxicity are important parameters for general toxicological risk assessments,

whereas oral, intraperitoneal and intravenous acute rodent toxicity are important in drug design. It should be stressed out that computational toxicity estimations are not only faster than the determination of toxic doses in animals, but can also help to reduce the amount of animal experiments. The model of choice to predict possible toxicity of the studied compounds is the rat acute toxicity.

Rat acute toxicity predicted by GUSAR is based on the combination of QNA (Quantitative Neighborhoods of Atoms) descriptors [S52], PASS (Prediction of Activity Spectra for Substances) predicted biological activity profiles [S53-S57], and self-consistent regression [S54]. QNA descriptors are calculated based on the connectivity matrix (C), standard values of ionization potential (IP) and electron affinity (EA) of atoms in a molecule.

Toxic doses are often given as LD₅₀ values in mg/kg body weight. The LD₅₀ is the median lethal dose meaning the dose at which 50% of test subjects die upon exposure to a compound [S58]. Using acceptable toxicity scales, the chemicals are assigned to various groups. One of the most common scales used is the Gosselin, Smith and Hodge scale using the following thresholds: class 1 (LD₅₀ ≤ 5 mg/kg) is the highest toxicity category (extremely or super toxic), class 2 (extremely toxic) includes chemicals with 5 < LD₅₀ ≤ 50 mg/kg, class 3 (very toxic) includes chemicals with 50 < LD₅₀ ≤ 500 mg/kg, class 4 (moderately toxic) includes chemicals with 500 < LD₅₀ ≤ 5.000 mg/kg, class 5 (slightly toxic) includes chemicals with 5.000 < LD₅₀ ≤ 15.000 mg/kg, and practically non-toxic with LD₅₀ > 15.000 mg/kg (Canadian Center for Occupational Health and Safety. What is an LD50 and LC50. http://www.ccohs.ca/oshanswers/chemicals/LD50.html#_1_6).

S5.2.2.2 Substrate/Metabolite specificity Prediction (SMP)

SMP is a web-service for *in silico* prediction substrate/metabolite specificity. Prediction of interaction with 18 cytochrome P450 and UGT isoforms: CYP1A2, CYP2C9, CYP2C19, CYP2D6, CYP3A4, UGT1A10, UGT1A1, UGT2B7, UGT1A7, UGT2B15, UGT1A8, UGT1A4, UGT2B17, UGT2B10, UGT1A3, UGT1A9, UGT1A6, UGT2B4. Prediction is based on PASS (Prediction of Activity Spectra for Substances) technology (<http://www.way2drug.com/PASSonline>) and MNA descriptors.

S5.2.2.3 Sites of metabolism prediction (SOMP)

The sites of metabolism prediction (SOMP) [S59] is an *in silico* tool for the prediction of SOMs for drug-like compounds for (five major human) cytochrome P450s: CYP1A2, CYP2C9, CYP2C19, CYP2D6 and CYP3A4. Also in the training set, the sites of glucoronidation catalyzed by UGT were included. It is based on PASS technology and Labelled Multilevel Neighborhoods of Atoms (LMNA) descriptors. A set of all possible structures with one labeled atom (SoLAs) with the

appropriate LMNA descriptors is generated for a new compound under the prediction of sites of metabolism (SOMs). The results of prediction of SOMs for new compounds are created on the basis of the prediction results of all SoLAs generated for a compound. Each SoLA relates to one appropriate SOM. For every SoLA the following values calculate the probability values Pt and Pf (Pt is the probability that labeled atom in the SoLA is the SOM of the appropriate enzyme and Pf is the probability that the labeled atom in SoLA is not the SOM of the appropriate enzyme). The atoms in compounds are arranged according to ΔP (Pt–Pf) values. The Invariant Accuracy of Prediction (IAP) criterion, similar to AUC (the area under the receiver operating characteristic (ROC) curve), was used to estimate the accuracy of the created method. Mathematically, IAP values equal the probability that the ΔP estimation has a higher value for a randomly selected positive example (SoLAs in which labeled atom is a SOM, $\Delta P+$) than for a randomly selected negative example (SoLAs in which labeled atom is not a SOM, $\Delta P-$):

$IAP = \text{Probability} (\Delta P+ > \Delta P-)$.

S5.2.2.4 ROSC–Pred: Rodent Organ–Specific Carcinogenicity Prediction

ROSC–Pred is an *in silico* predictive tool for rodent organ–specific carcinogenicity prediction on the basis of structural formula of compounds [S60]. Prediction is based on PASS (Prediction of Activity Spectra for Substances) technology and training sets created on the basis of data from Carcinogenic Potency Database (CPDB). The CPDB data are available on EPA Distributed Structure-Searchable Toxicity (DSSTox) Public Database Network (ftp://ftp.epa.gov/dsstoxftp/DSSTox_Archive_20150930/CPDBAS_DownloadFiles/). For input data on the structure of test compound it may be used SMILES and MOL files or even the integrated Marvin Sketch Javascript applet.

S5.2.2.5 Quantitative prediction of anti-target interaction profiles for chemical compounds by GUSAR software.

GUSAR software was developed to create QSAR/QSPR models on the basis of the appropriate training sets represented as SD file contained data about chemical structures and endpoint in quantitative terms. The QSAR models for the sets of thirty–two end–points (IC_{50} , K_i and K_{act}) include the data about 4000 chemical compounds interacting with 18 anti-target proteins (13 receptors, 2 enzymes and 3 transporters) [S61].

CHARACTERISTICS OF QSAR MODELS FOR ANTITARGETS SETS

Activity Name	End-point	Number of compounds Training set /	Number of models	R2 training set	Q2 training set	R2 test set	Coverage,%
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		Test set					
5-hydroxytryptamine 1B receptor antagonist	IC ₅₀	297 / 74	8	0.83	0.79	0.67	100.0
5-hydroxytryptamine 1B receptor antagonist	Ki	266 / 66	7	0.73	0.66	0.72	100.0
5-hydroxytryptamine 2A receptor antagonist	IC ₅₀	555 / 143	13	0.83	0.78	0.71	98.6
5-hydroxytryptamine 2A receptor antagonist	Ki	1010 / 252	13	0.72	0.65	0.59	99.6
5-hydroxytryptamine 2C receptor antagonist	IC ₅₀	128 / 32	18	0.77	0.73	0.58	100.0
5-hydroxytryptamine 2C receptor antagonist	Ki	487 / 121	14	0.74	0.66	0.62	99.2
alpha1a adrenergic receptor antagonist	IC ₅₀	438 / 111	16	0.79	0.73	0.72	98.2
alpha1a adrenergic receptor antagonist	Ki	1366 / 344	5	0.83	0.79	0.80	97.0
alpha1b adrenergic receptor antagonist	Ki	410 / 102	17	0.73	0.66	0.63	100.0
alpha-2A adrenergic receptor antagonist	IC ₅₀	109 / 27	16	0.88	0.84	0.75	100.0
alpha-2A adrenergic receptor antagonist	Ki	525 / 131	17	0.84	0.79	0.77	99.2
amine oxidase [flavin-containing] A inhibitor	IC ₅₀	286 / 71	9	0.80	0.75	0.72	100.0
amine oxidase [flavin-containing] A inhibitor	Ki	60 / 15	5	0.73	0.62	0.64	100.0
androgen receptor antagonist	IC ₅₀	116 / 29	8	0.79	0.73	0.67	100.0
carbonic anhydrase II activator	K _{act}	104 / 26	20	0.92	0.90	0.91	100.0
carbonic anhydrase I activator	K _{act}	108 / 27	12	0.98	0.97	0.93	100.0
carbonic anhydrase I inhibitor	Ki	935 / 234	11	0.91	0.86	0.86	98.3
carbonic anhydrase II inhibitor	IC ₅₀	866 / 217	7	0.87	0.79	0.76	98.6
d(1A) dopamine receptor antagonist	IC ₅₀	126 / 31	11	0.76	0.72	0.80	100.0
d(1A) dopamine receptor antagonist	Ki	291 / 73	10	0.72	0.66	0.57	100.0
d3 dopamine receptor antagonist	Ki	822 / 206	9	0.73	0.66	0.62	98.0
delta-type opioid receptor antagonist	Ki	1044 / 261	16	0.75	0.70	0.65	98.5
estrogen receptor antagonist	IC ₅₀	402 / 100	4	0.66	0.61	0.70	97.0
estrogen receptor antagonist	Ki	255 / 68	13	0.76	0.71	0.70	100.0
kappa-type opioid receptor antagonist	Ki	884 / 221	7	0.74	0.67	0.65	100.0
mu-type opioid receptor antagonist	IC ₅₀	545 / 136	7	0.67	0.61	0.70	97.8
mu-type opioid receptor antagonist	Ki	1354 / 338	4	0.69	0.62	0.60	96.7
sodium- and chloride-dependent GABA transporter 1 antagonist	IC ₅₀	75 / 19	10	0.9	0.86	0.89	100.0
sodium-dependent dopamine transporter antagonist	IC ₅₀	920 / 230	5	0.7	0.65	0.67	98.3
sodium-dependent dopamine transporter antagonist	Ki	655 / 164	7	0.77	0.69	0.64	100.0
sodium-dependent serotonin transporter antagonist	IC ₅₀	796 / 199	7	0.8	0.75	0.69	97.5

sodium-dependent serotonin transporter antagonist	Ki	823 / 206	2	0.72	0.65	0.61	95.6
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S5.2.2.6 Environmental ecotoxicity predicted by GUSAR

Quantitative prediction of ecotoxicity for chemical compounds by GUSAR software. The QSAR models were developed for the following endpoints: 96-h fathead minnow 50% lethal concentration, 48-h daphnia magna 50% lethal concentration, Tetrahymena pyriformis 50% growth inhibition concentration and Bioconcentration Factor.

CHARACTERISTICS OF QSAR MODELS FOR ECOTOXICITY PREDICTIONS

Activity Name	N train	N test	N models	R2	Q2	R2 test	RMSE test	Coverage, %
Fathead Minnow LC50 Log10(mmol/L)	462	115	173	0.83	0.79	0.83	0.68	100
Bioaccumulation factor Log10(BCF)	478	120	196	0.83	0.80	0.85	0.56	100
Tetrahymena pyriformis IGC50 Log10(mol/L)	874	219	196	0.91	0.88	0.87	0.39	100
Daphnia magna LC50 - Log10(mol/L)	269	68	117	0.82	0.78	0.65	0.99	100

N train - number of compounds in the training set;

N test - number of compounds in the test set;

R2 - average R2 of the models calculated for the appropriate training set;

Q2 - average Q2 of the models calculated for the appropriate training set;

Coverage - % compounds from the test set in Applicability Domain.

S5.2.2.7 CLC–Pred: *in silico* prediction of cytotoxicity for tumor and non-tumor cell lines

CLC–Pred (Cell Line Cytotoxicity Predictor) is an *in silico* predictive tool for the prediction of cytotoxic effect of chemical compounds in non-transformed and cancer cell lines, based on structural formula. CLC–Pred provides a prediction of the cytotoxicity of a chemical compound to assess the relevance of the substance's inclusion in experimental screening. Prediction is based on PASS (Prediction of Activity Spectra for Substances) technology (<http://www.way2drug.com/PASSonline>) and the training set created on the basis of data on cytotoxicity retrieved from ChEMBLdb (version 23) (<https://www.ebi.ac.uk/chembl/db/>). For input data on the structure of test compound it may be used SMILES, MOL file or even the integrated Marvin Javascript applet.

S5.2.2.8 Prediction of activity spectra

Virtual target screening was adopted in order to computationally screen one selected compound against a collection of virtual protein structures, to determine if a particular protein would be a potential target of a compound of interest. Understanding chemical-biological interactions is rather a complicated task because of the multifaceted structure-function relationships in biological

systems. Prediction of activity spectra for substances (PASS) project encompasses a computational tool being able to predict the complete biological activity profile of drug-like compounds [S62]. PASS may be used to estimate general pharmacological potential of compounds under study. Since computing is carried out based on a structural formula, the prediction may be obtained for compounds that are just designed on the computer, neither synthesized nor tested yet [S63]. Based on prediction, one may select which of the proposed structures are the most promising for a particular purpose.

The PASS estimates the probable biological activity profiles for compounds under study based on their structural formulae presented in MOL file or SDF file format. PASS prediction evaluates the general biological potential of a drug-like molecule, based on the comparison of the user's compound to a database about structure-activity relationships of more than 313,000 of drug-like biologically active compounds, using the Multilevel Neighborhoods of Atoms (MNA) structure descriptors. General list of predictable biological activities consists of over 6,400 terms including pharmacotherapeutic effects (e.g. antiarrhythmic, antihypertensive, hepatoprotectant, nootropic, etc.), biochemical mechanisms of action (e.g. cyclooxygenase inhibitor, 5 hydroxytryptamine antagonist, acetylcholine M1 receptor agonist, etc.), adverse & toxic effects (e.g. carcinogenic, mutagenic, hematotoxic, etc.), metabolism (e.g. CYP3A4 and CYP1A1 inhibition, CYP1A inducer, etc.), gene expression regulation (e.g. TH expression enhancer, TNF expression inhibitor, VEGF expression inhibition), transporter-related activities (e.g. P-glycoprotein 3 inhibitor, nucleoside transporters inhibitors) [S63].

S5.2.2.9 Drug-induced gene expression profiles prediction (DIGEP-Pred)

Drug-Induced Gene Expression Profiles Prediction (DIGEP-Pred) is a web-service for *in silico* prediction of drug-induced changes of gene expression profiles based on structural formula. Prediction of drug-induced changes of gene expression with DIGEP-Pred *in silico* tool is based on PASS technology and two training sets created on the basis of data on drug-induced changes of gene expression profiles retrieved from Comparative Toxicogenomics Database (CTD), Connectivity Map Database and L1000 Project [S64]. *In silico* prediction is based on the structural formula of the tested compound. The gene expression changes can be considered as a particular type of the biological activity of a drug. The probability "to be active" (Pa) estimates the chance that the studied compound belongs to the sub-class of active compounds (resembles the structures of molecules, which are the most typical in a sub-set of "actives" in PASS training set). The probability "to be inactive" (Pi) estimates the chance that the studied compound belongs to the sub-class of inactive compounds (resembles the structures of molecules, which are the most typical in a sub-set of "inactives" in PASS training set). Curated chemical gene interactions data in the training

sets were retrieved from the Comparative Toxicogenomics Database (CTD), Mount Desert Island Biological Laboratory, Salisbury Cove, Maine. <http://ctdbase.org/> [October, 2015].

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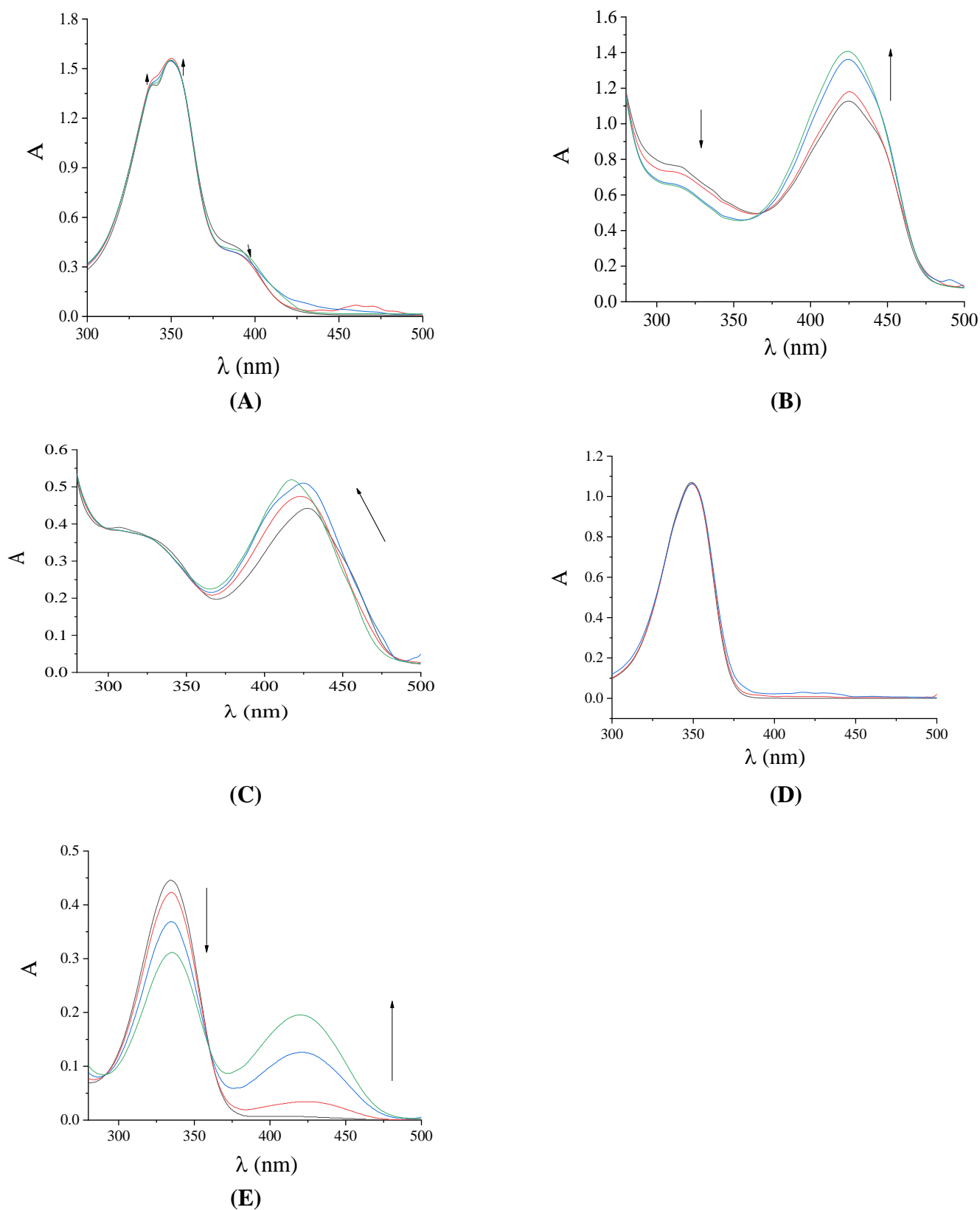


Figure S1. UV spectra of DMSO solution of (A) **1** (10^{-4} M), (B) **3** (10^{-4} M), (C) **4** (10^{-4} M), (D) 4-Et₂N-saloH (10^{-5} M) and (E) 5-F-saloH (10^{-4} M) in the presence of increasing amounts of CT DNA. The arrows show the changes upon increasing amounts of CT DNA.

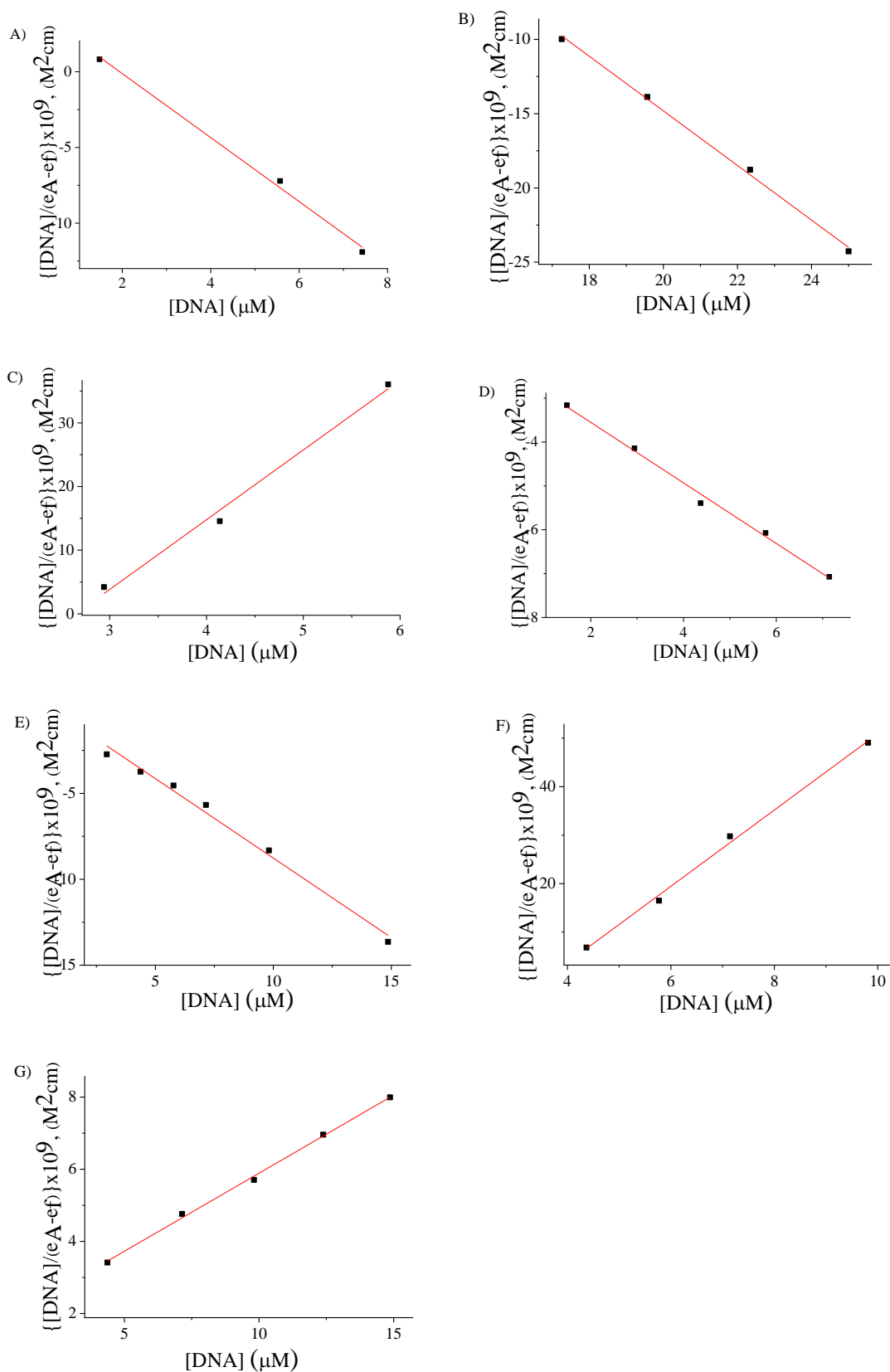


Figure S2. Plot of $\frac{[DNA]}{(\epsilon_A - \epsilon_f)}$ versus $[DNA]$ for (A)-(G) 4-Et₂N-saloH, 5-F-saloH and complexes **1–5**, respectively.

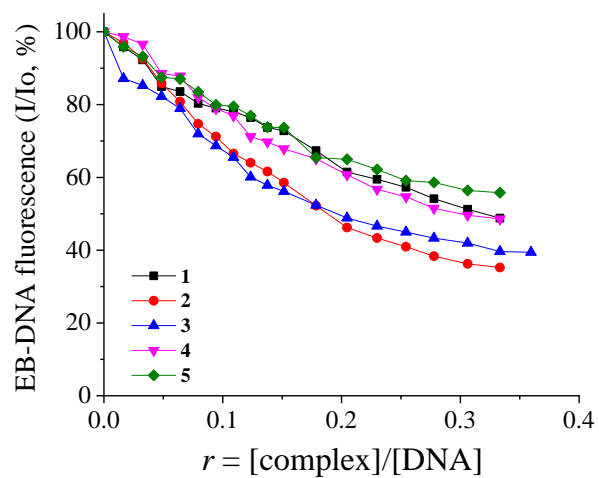


Figure S3. Plot of EB–DNA relative fluorescence emission intensity at $\lambda_{\text{emission}} = 592 \text{ nm}$ (%) *versus* r ($r = [\text{complex}]/[\text{DNA}]$) in the presence of complexes **1–5** (up to 48.8 % of the initial EB–DNA fluorescence emission intensity for **1**, 35.2 % for **2**, 39.4 % for **3**, 48.6 % for **4** and 55.8% for **5**).

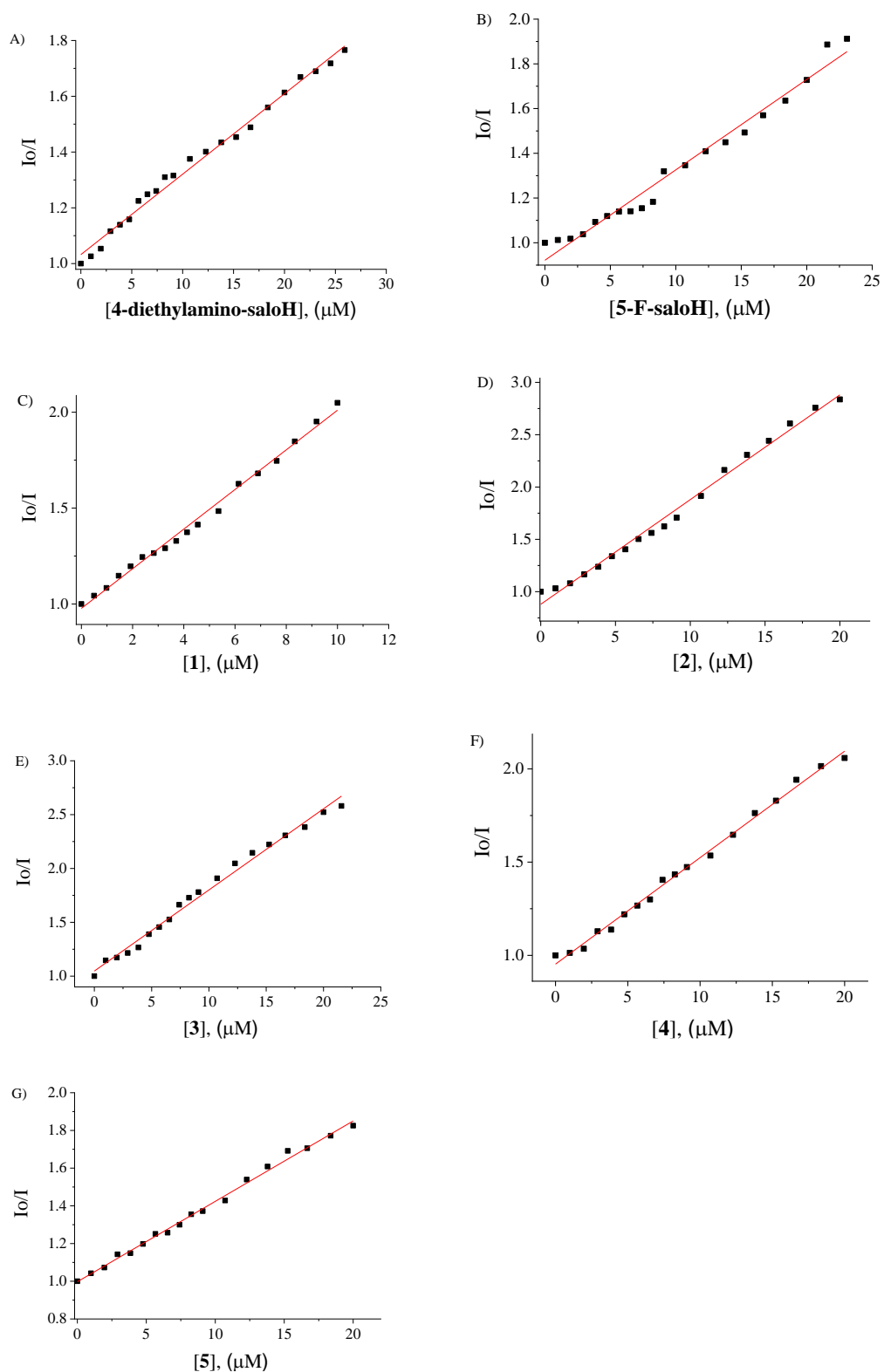
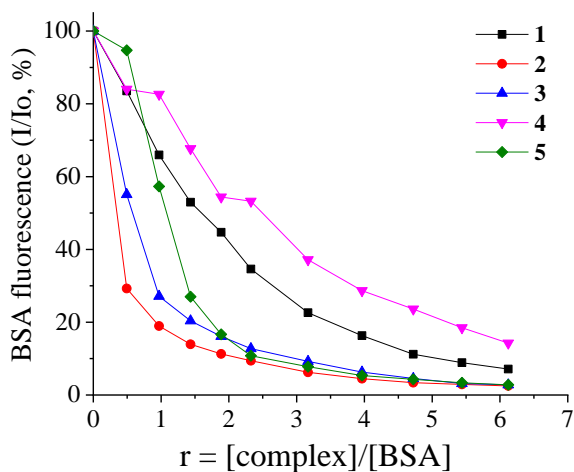
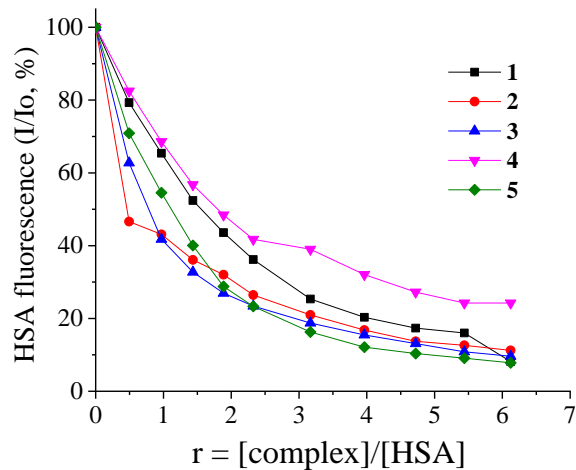


Figure S4. Stern–Volmer quenching plot of EB bound to CT DNA for (A)-(G) 4-Et₂N-saloH, 5-F-saloH and complexes 1–5, respectively.



(A)



(B)

Figure S5. (A) Plot of % relative BSA–fluorescence emission intensity at $\lambda_{em}=351$ nm (%) *versus* r ($r = [\text{complex}]/[\text{BSA}]$) for complexes **1–5** (up to 7.2 % of the initial BSA fluorescence for **1**, 2.5 % for **2**, 2.8% for **3**, 14.3% for **4** and 2.8% for **5**) in buffer solution (150 mM NaCl and 15 mM trisodium citrate at pH 7.0). (B) Plot of % relative HSA–fluorescence emission intensity at $\lambda_{em}=342$ nm (%) vs r ($r = [\text{complex}]/[\text{HSA}]$) for complexes **1–5** (up to 8.2% of the initial HSA fluorescence for **1**, 11.2% for **2**, 9.6% for **3**, 24.3% for **4** and 7.8 % for **5**) in buffer solution (150 mM NaCl and 15 mM trisodium citrate at pH 7.0).

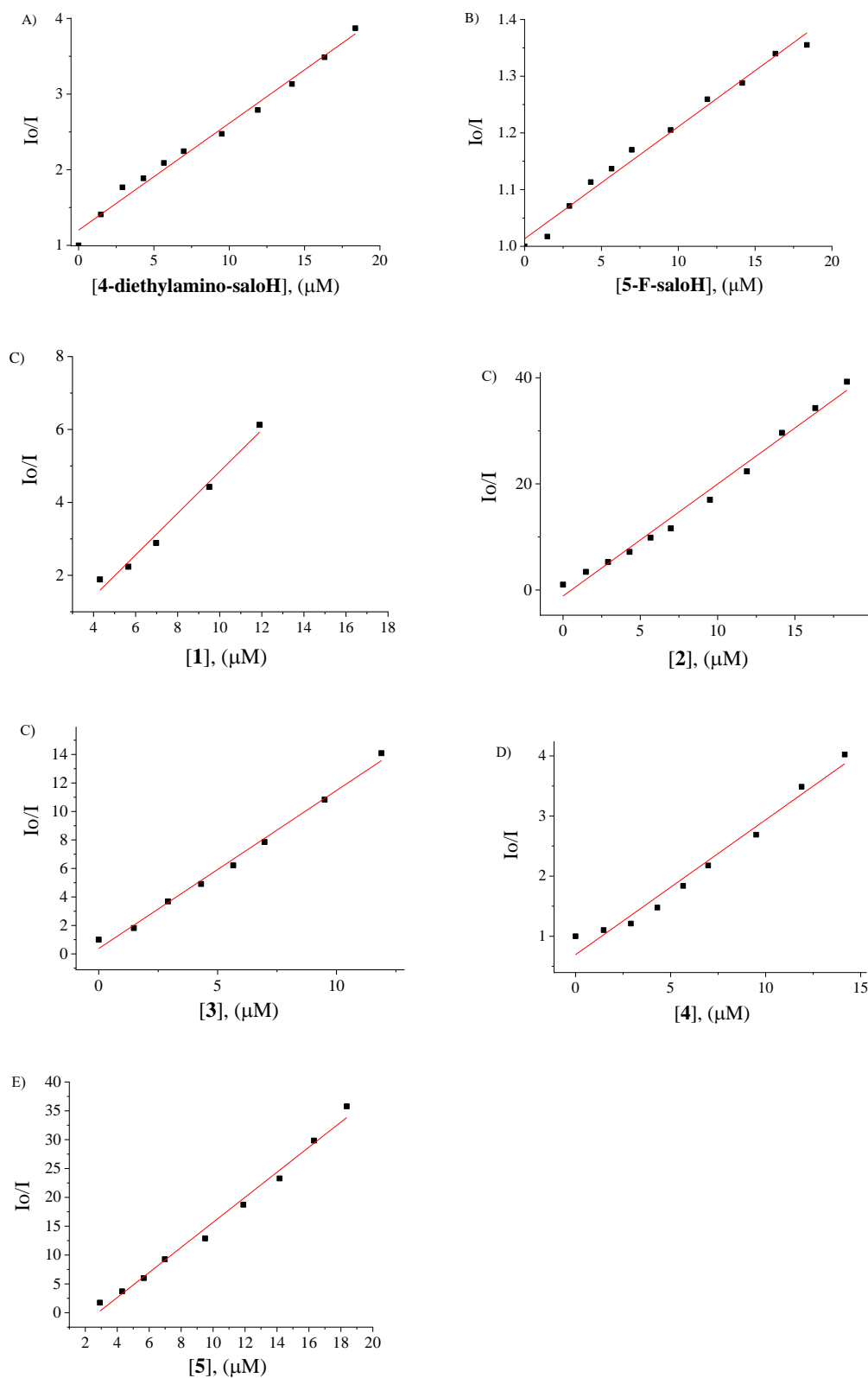


Figure S6. Stern–Volmer quenching plot of BSA for (A)–(G) 4-Et₂N-saloH, 5-F-saloH and complexes 1–5, respectively.

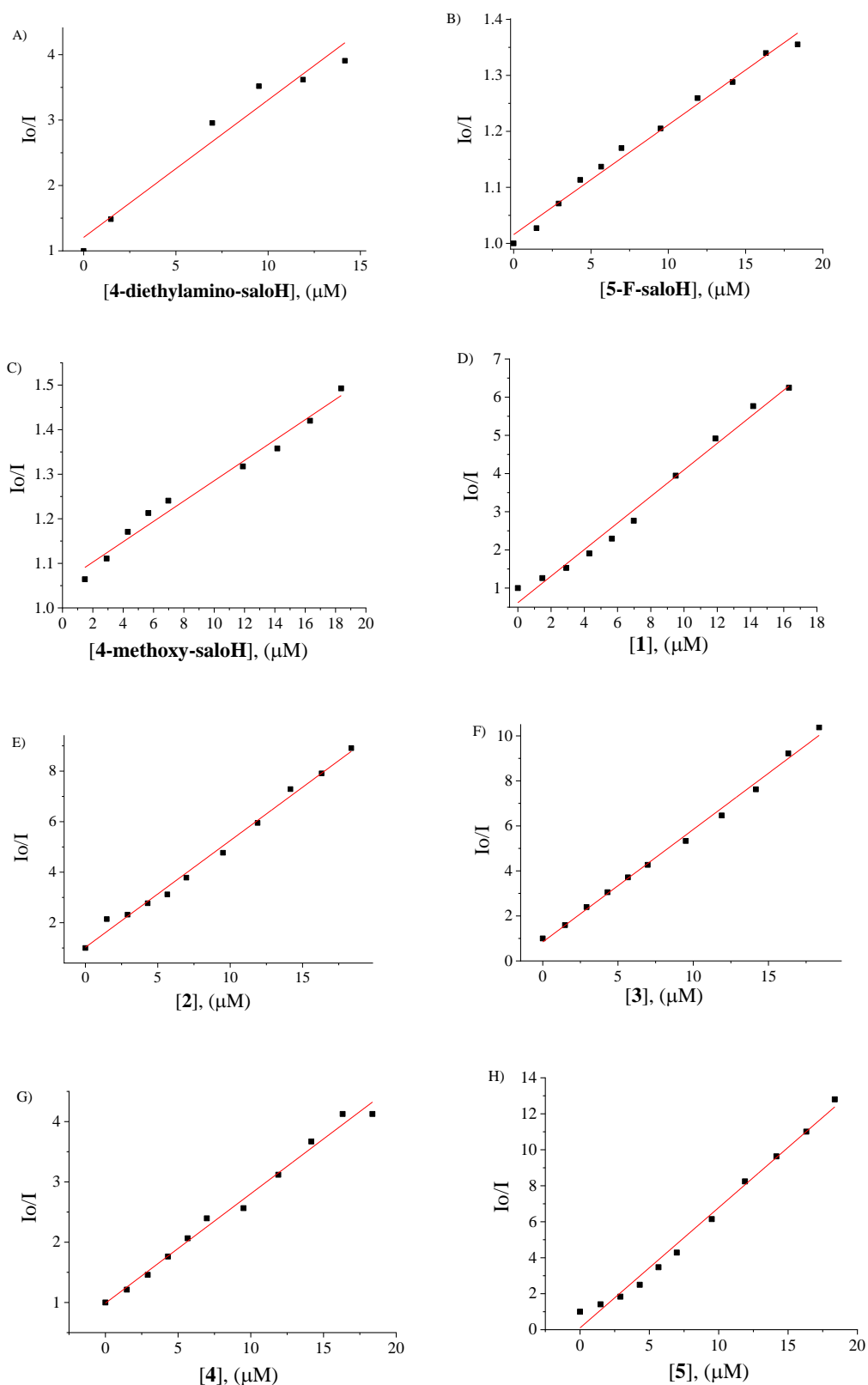


Figure S7. Stern–Volmer quenching plot of HSA for (A)-(H) 4-Et₂N-saloH, 5-F-saloH, 4-MeO-saloH and complexes 1–5, respectively.

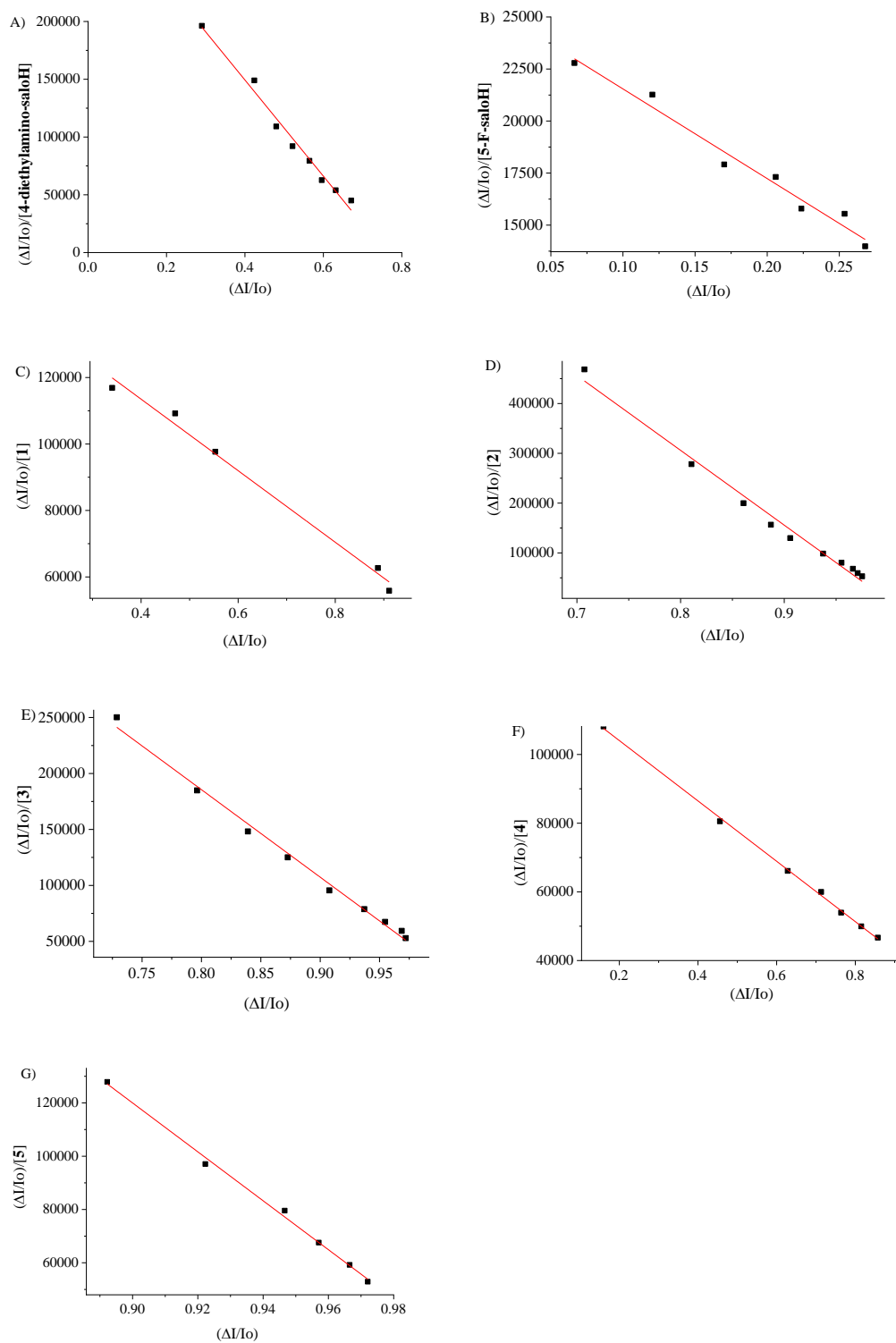


Figure S8. Scatchard plot of BSA for (A)-(G) 4-Et₂N-saloH, 5-F-saloH and complexes 1–5, respectively.

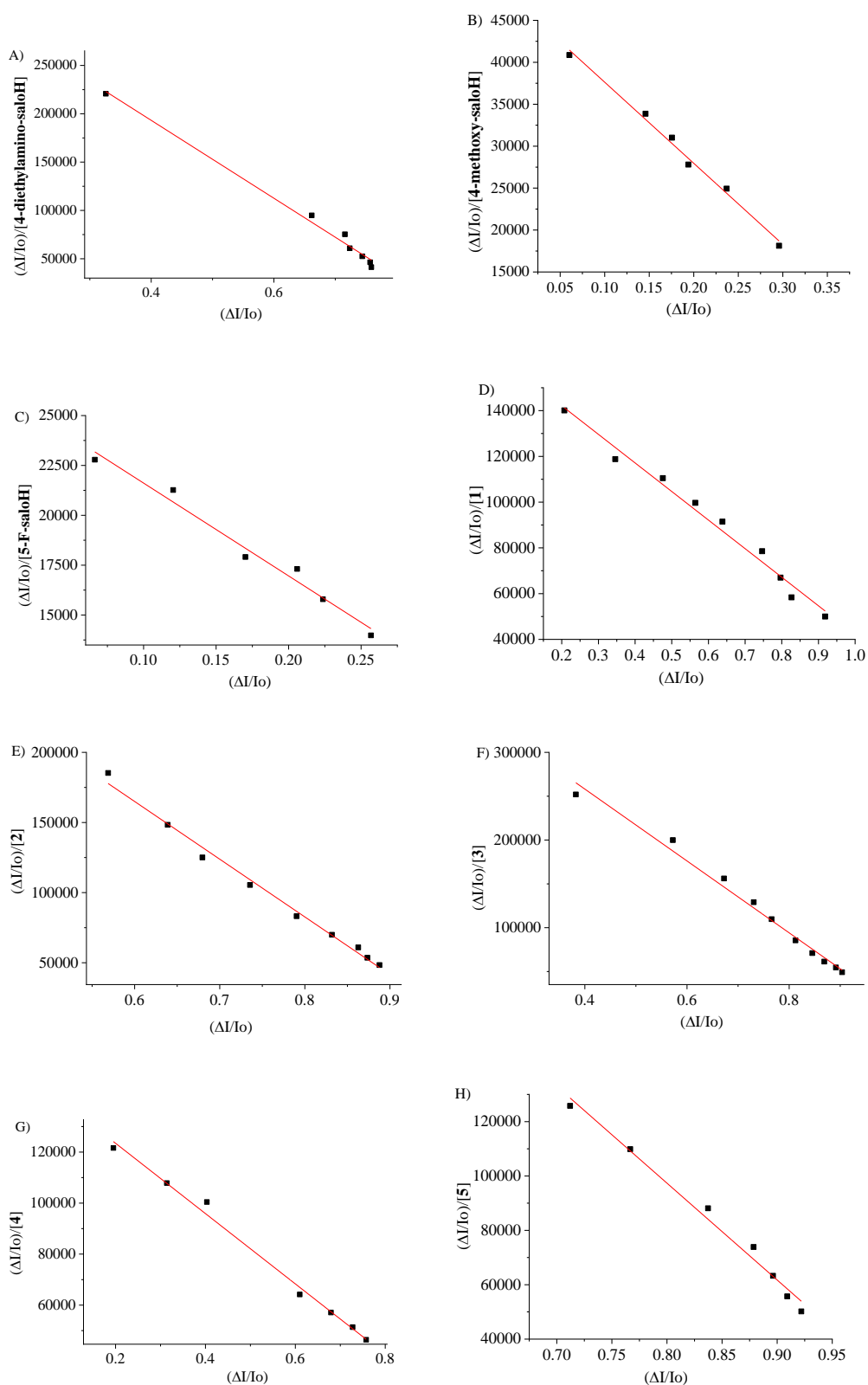


Figure S9. Scatchard plots of HSA for (A)-(H) 4-Et₂N-saloH, 5-F-saloH, 4-MeO-saloH and complexes 1-5, respectively.

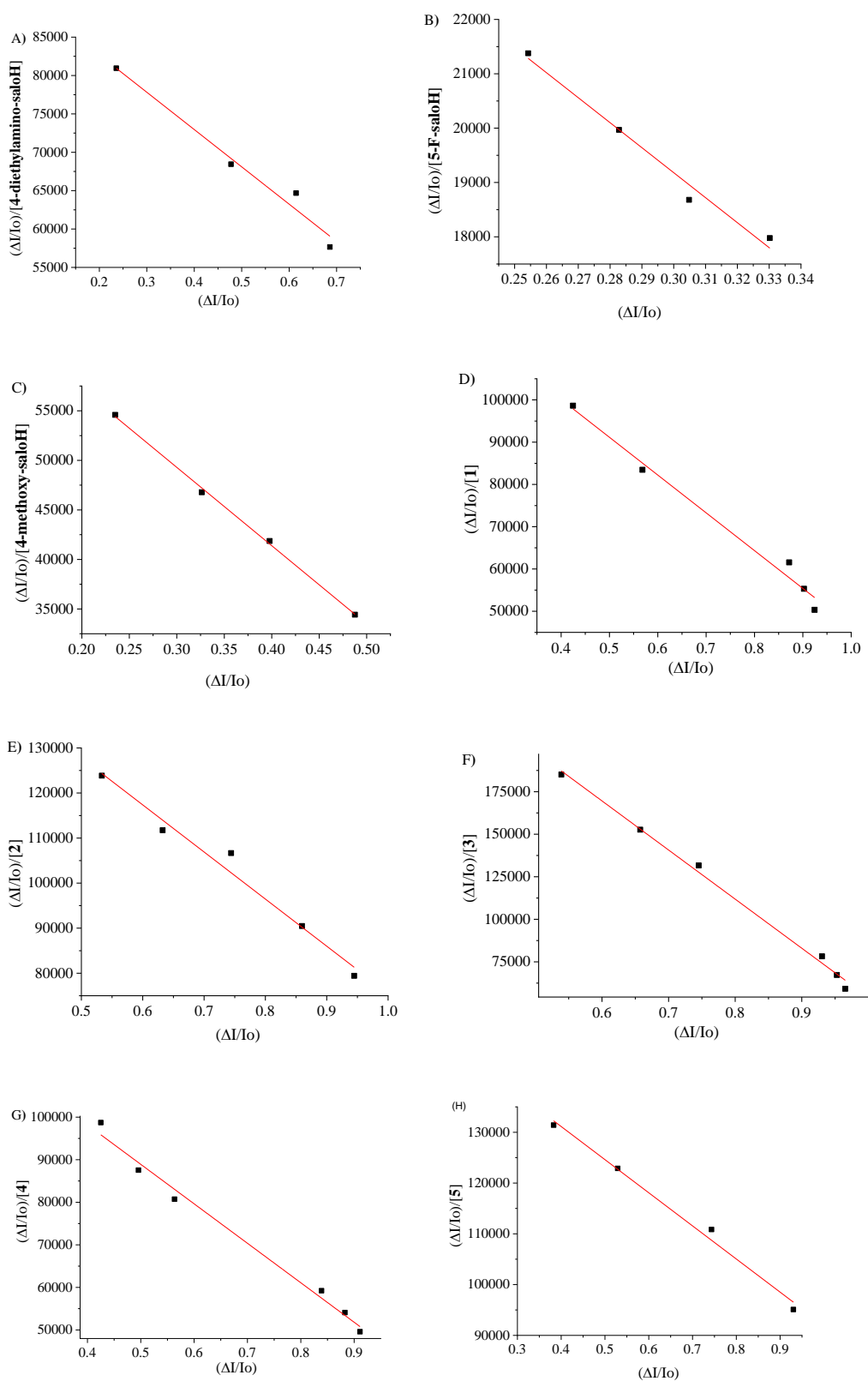


Figure S10. Scatchard plots of BSA-ibuprofen for (A)-(H) 4-Et₂N-saloH, 5-F-saloH, 4-MeO-saloH and complexes 1-5, respectively.

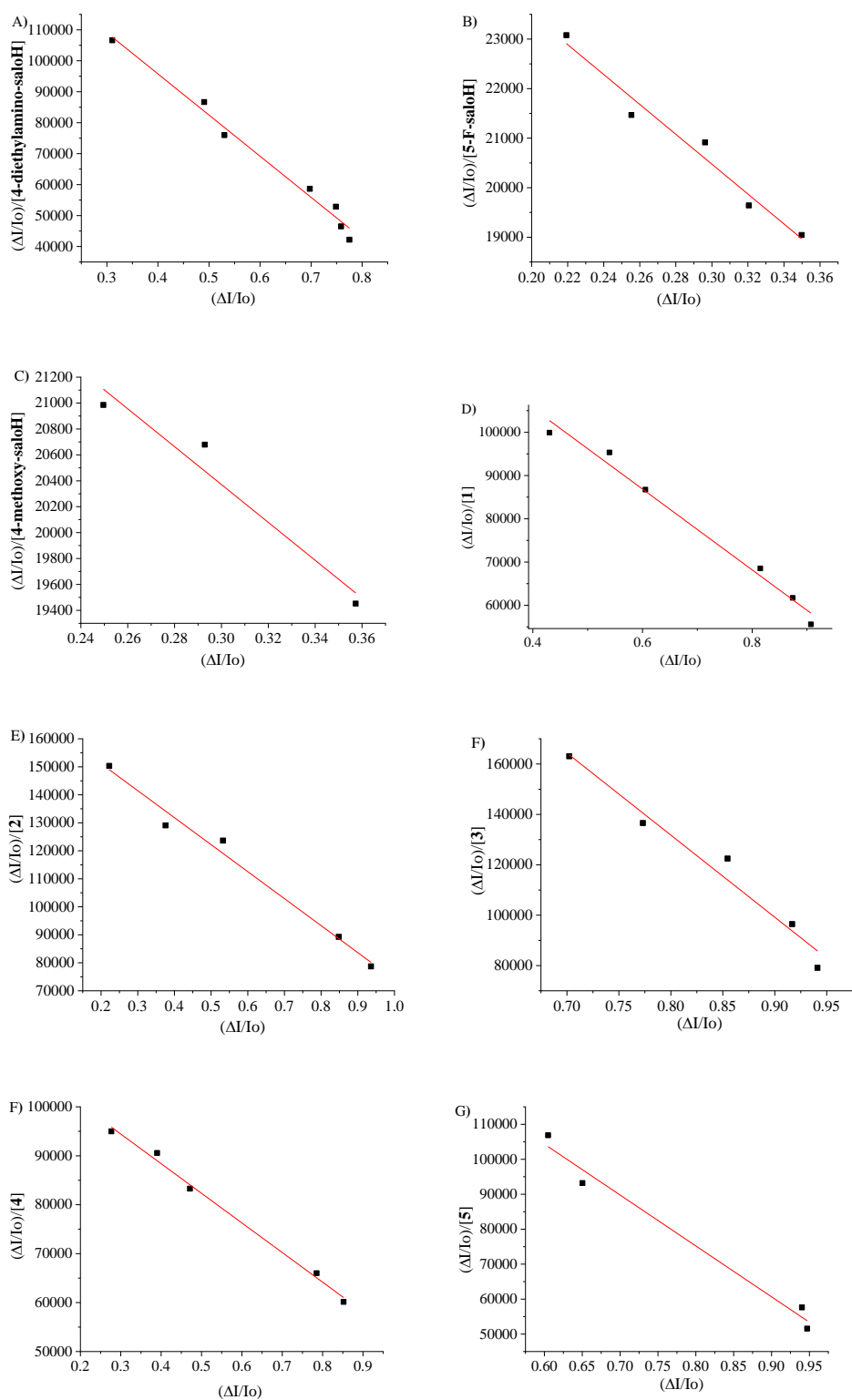


Figure S11. Scatchard plot of BSA-warfarin for (A)-(H) 4-Et₂N-saloH, 5-F-saloH, 4-MeO-saloH and complexes 1–5, respectively.

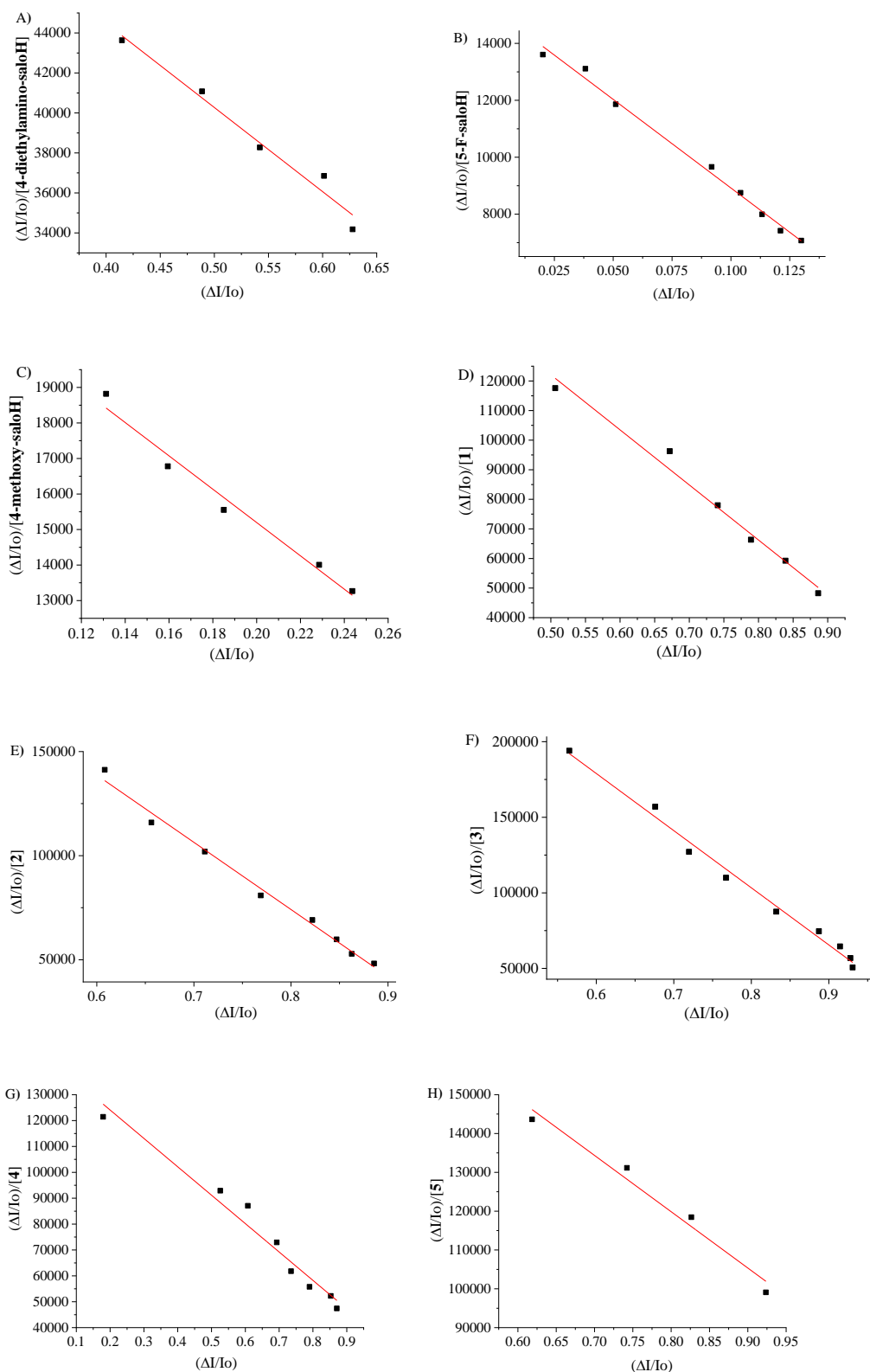


Figure S12. Scatchard plots of HSA–ibuprofen for (A)-(H) 4–Et₂N–saloH, 5–F–saloH, 4–MeO–saloH and complexes **1–5**, respectively.

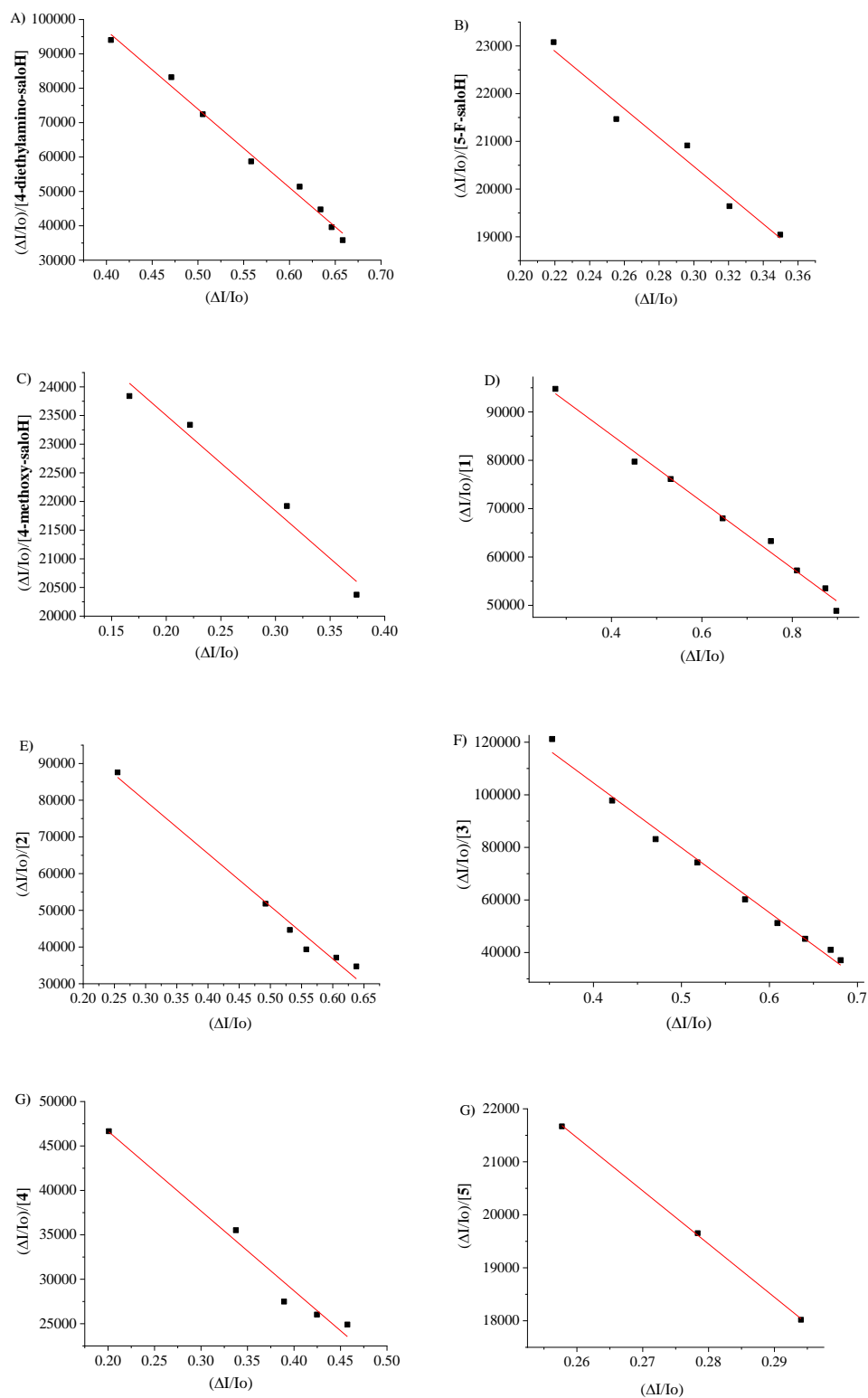


Figure S13. Scatchard plots of HSA-warfarin for (A)-(H) 4-Et₂N-saloH, 5-F-saloH, 4-MeO-saloH and complexes 1-5, respectively.

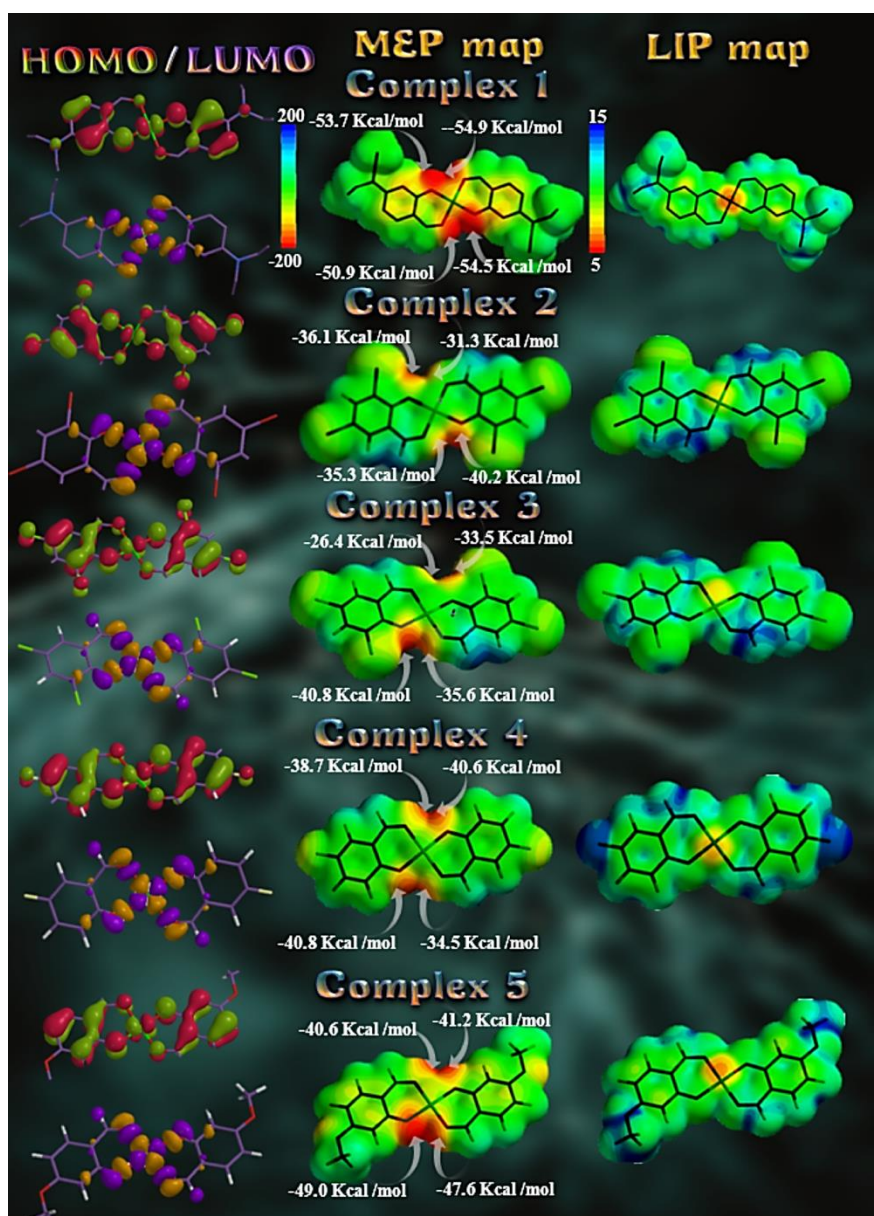


Figure S14. Depiction of computed frontier molecular orbitals HOMO and LUMO (solid surface) (left panel), MEP map (center panel, transparent surface), and LIP map (right panel, transparent surface) for complexes 1–5. In MEP maps, a molecular electron density surface (isovalue = 0.002 e/bohr³) generally encompassing at least 95% of the electronic charge, mapped with electrostatic potential (superimposed on the isodensity surface). The potential represents electron-rich (red, negative values) and electron-poor (blues, positive values) regions (intermediate values are colored orange, yellow and green) (potential ranges from –200 to 200 kJ/mol for MEP and 5–15 kJ/mol for LIP, shown in color scale). The exact MEP on phenolato and carboxylato oxygens on each molecule is also illustrated. The order of electron rich to poor regions is represented in rainbow colors as red < orange < yellow < green < blue. Colors toward red correspond to negative potential (stabilizing interaction between the molecule and a positive charge), while colors toward blue correspond to positive potential. LIP maps, representing an indicator of electrophilic addition, are an overlay of the energy of electron removal (ionization) on the electron density. By convention, red regions on a local ionization potential map indicate areas from which electron removal (ionization) is relatively easy, meaning that they are subject to electrophilic attack. These are easily distinguished from regions where ionization is relatively difficult (by convention, colored blue). The red and green color distributions represent positive and negative phase in molecular orbital wave function, respectively (isovalue = 0.032 au). HOMO (electron donor regions) determines the ionization potentials (assess the ionization energy), while LUMO (electron acceptor regions) determines the electron affinity.

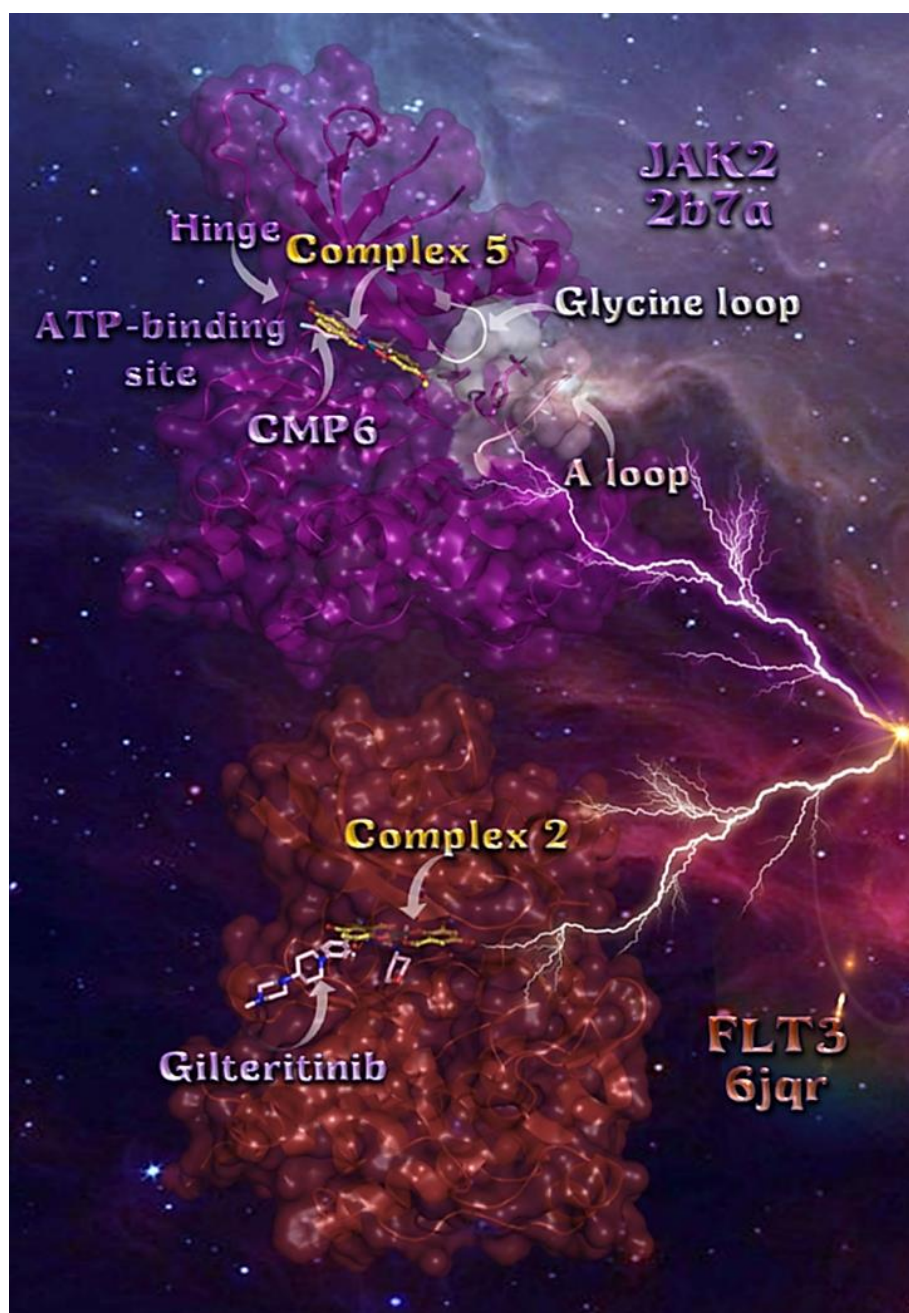


Figure S15. (Lower panel) Docking pose orientation of **2** on the crystal structure of the FLT3 kinase domain (PDB: 6jqr) bound with the FLT3 inhibitor Gilteritinib. Target protein is illustrated as cartoon-colored in ruby with depth cue in the ray-tracing rendering of the whole structure with additional depiction of semi-transparent surface colored according to cartoon. At the binding pocket of **2** in the crystal structure of FLT3 is also accommodated the Gilteritinib inhibitor. (Upper panel) Docking pose orientation of **5** on the crystal structure of JAK2 kinase domain (PDB: 2b7a) bound with its inhibitor CMP6. Target protein is illustrated as cartoon-colored in deep purple with depth cue in the ray-tracing rendering of the whole structure with additional depiction of semi-transparent surface colored according to cartoon. At the ATP-binding pocket of **5** in the crystal structure of JAK2 is also accommodated the CMP6 inhibitor. In both structures, complexes **2** and **5** are rendered in ball-and-stick mode colored according to atom type in yellow orange C atoms, while Gilteritinib and CMP6 inhibitors are rendered in stick model colored according to atom type in light pink. Heteroatom color-code: O: red, N: blue, Br: firebrick red, and Pd: deep teal. Hydrogen atoms are omitted from all molecules for shake of clarity. The final structure was ray-traced and illustrated with the aid of PyMol Molecular Graphics Systems.

Table S1. Crystallographic data, data collection and refinement details for complex **1**.

Crystal data	
Chemical formula	C ₂₄ H ₃₁ N ₃ O ₄ Pd
M_r	531.93
Crystal system	Monoclinic
Space group	$P2_1/n$
Temperature (K)	295
a (Å)	6.4774 (6)
b (Å)	8.7509 (8)
c (Å)	21.197 (2)
β (°)	98.350 (3)
V (Å ³)	1188.76 (19)
Z	2
Radiation type	Mo $K\alpha$
μ (mm ⁻¹)	0.82
Crystal size (mm)	0.18 × 0.16 × 0.05
Data collection	
Diffractometer	Bruker Kappa Apex2
Absorption correction	Numerical, Analytical Absorption (De Meulenaer & Tompa, 1965)
T_{\min} , T_{\max}	0.88, 0.96
No. of measured reflections	5412
No. of independent reflections	2246
No. of observed [$I > 2.0\sigma(I)$] reflections	1960
R_{int}	0.023
$(\sin \theta/\lambda)_{\text{max}}$ (Å ⁻¹)	0.612
Refinement	
$R[F^2 > 2\sigma(F^2)]$	0.035
$wR(F^2)$	0.067
S	1.00
No. of reflections	1960
No. of parameters	145
No. of restraints	4
H-atom treatment	H-atom parameters constrained
$\Delta\rho_{\text{max}}$, $\Delta\rho_{\text{min}}$ (e Å ⁻³)	0.56, -0.44

Table S2. Binding interactions of complex **1** with CT DNA (Atom numbering and bond lengths are derived from PyMol software).

Complex 1 moiety	CT DNA		
	Pyrimidine/Purine	Bond length (Å)	Type ^a
4-Et ₂ N-salo	dC11/C4	2.8	Hph
	**dC15/O2	3.8	π -polar
	dC11/C5	2.7	π -alkyl
	dG10/C4	2.7	π -alkyl
	dA18/OP1	3.0	P
	dG10/O3	3.3	π -polar
	*dC11/O2	3.5	P
	**dG10/N2	3.8	Hb
	dG10/N3	3.7	P
	***dG16/N2	3.8	Hb
	dA17/C5	3.5	π -alkyl
	*dG14/N2	3.9	π -polar
	dG14/N3	3.2	π -alkyl
	dC15/C2	3.9	Hph
	dG16/C4	3.0	π -alkyl
	dG16/C5	2.7	Hph
	dC11/OP1	3.4	π -polar
	dC11/O4	2.4	P

^atype of interaction: Hb = hydrogen bond; Hph = hydrophobic; P = polar; π -polar =pi-polar; π -alkyl =pi-alkyl hydrophobic

Complex **1** interrupts interstrand Hb base paring dG14≡dC11 (*), dG10≡dC15 (**), and dG16≡dC9 (***)

Table S3. Binding interactions of lowest energy binding pose of complex **3** with *E. coli* and *S. aureus* DNA-gyrases (PDB accession numbers: 1KZN, and 5CDM, respectively). (Atom numbering and bond lengths are derived from PyMol software) (type of interaction: π - π : pi-pi sandwich, π -alkyl: pi-alkyl hydrophobic, π -cation and π -anion: pi-charged electrostatic interactions, π -polar: pi-polar, Hb: hydrogen bond, Hph: hydrophobic, P: polar, Halogen bond) (all binding contact residues are common with that of CBN).

Complex 3 moiety	<i>E. coli</i> DNA-gyrase amino acid residue	Bond length (Å)	Type
3,5-diCl-salo	Val43 (V43)/O	4.0	π -polar
	Val43 (V43)/O	3.5	Halogen bond
	Glu (E50)/O ϵ 2	3.5	Hb
	Glu (E50)/O ϵ 2	3.3	π -anion
	Asp (D73)/O δ 1	2.6	Halogen bond
	Asp (D73)/O δ 1	3.9	π -anion
	Arg (R76)/N η 1	3.7	π -cation
	Arg (R76)/C ζ	3.3	Cation-dipole halogen bond
	Gly (G77)/NH	3.3	Hb
	Gly (G77)/O	3.0	π -polar
	Ile (I78)/NH	3.5	Hb
	Ile (I78)/C γ 1	3.7	Hph
	Pro (P79)/C δ	3.2	π -alkyl
	Pro (P79)/C δ	3.5	Halogen bond
	Val(V120)/C γ 2	3.5	π -alkyl
	Arg (R76)/N η 1	2.8	π -cation
	Thr (T165)/O γ 1	3.4	Hb
	Thr (T165)/C β	3.6	π -alkyl
Complex 3 moiety	<i>S. aureus</i> DNA gyrase amino acid residue/ DNA Pyrimidine-Purine	Bond length (Å)	Type
3,5-diCl-salo	Arg (R458)/C β	2.6	π -alkyl
	Arg (R458)/N η 1	3.7	Hb
	Glu (E477)/O ϵ 1, ϵ 2	3.8, 2.9	π -anion
	Glu (E477)/O ϵ 2	2.7	Halogen bond
	PTR-123/O3P	3.7	π -polar
3,5-diCl-salo	dG'2009	3.3-3.5	π - π sandwich
	dG'2009/O	3.5	Halogen bond
	dG'2013/O4	3.8	Halogen bond
	dG'2009/O4	3.4	Halogen bond
	dG'2013/O4	2.9	π -polar
	dG'2013/N9	3.2	π -polar
	dG'2013/N3	3.2	P

Table S4. Binding interactions of lowest energy binding pose of complexes **1** with 5-LOX bound with NDGA (PDB accession number 6N2W), and **3** with FLAP protein bound with MK-591 (PDB ID: 2Q7M). (Atom numbering and bond lengths are derived from PyMol software) (type of interaction: Hb: hydrogen bond, Hph: hydrophobic, P: polar, π -alkyl: pi-alkyl hydrophobic, π -cation: pi-charged electrostatic interactions, π -polar: pi-polar) (binding contact residues denoted in asterisk are common with that of trolox).

Complex 1 moiety	5-LOX bound with NDGA amino acid residue - 6N2W	Bond length (Å)	Type
4-Et ₂ N-salo	Arg (R370)/N η 2	2.6	Hb
	Arg (R370)/N η 2	3.0	π -cation
	Arg (R370)/N η 1	2.3	Hb
	*Arg (R457)/N η 1	3.5	π -cation
	*Arg (R457)/C δ	3.6	π -alkyl
	Phe (F450)	2.8	π -alkyl
	*Ser (S447)/O	3.3	P
	Leu (L448)/C δ	2.7	Hph
	Asp (D442)/O δ 1	3.0	π -anion
	Asp (D442)/C β	3.5	π -alkyl
	Asp (D285)/O	3.0	P
	Leu (L288)/N	3.3	P
	Leu (L288)/C β	2.9	Hph
	Leu (L288)/C δ 1	3.0	Hph
Complex 3 moiety	FLAP bound with MK591 - 2Q7M	Bond length (Å)	Type
3,5-diCl-salo with α 1 helix of chain E	Ala (A27)/C β	3.4	π alkyl
	Gly (G24)/C α	3.6	P
	Val (V20)/O	3.1	π -polar
	Val (V20)/C γ 1	3.2	π -alkyl
	Val (V21)/C α	3.9	π -alkyl
3,5-diCl-salo with α 2 helix of chain D	Asn (N59)/O	3.5	Hydrogen bond σ -hole
	Asp (D62)/C β	3.9	π -alkyl
	Asp (D62)/O	2.4	Halogen bond
	Thr (T66)/C γ 2	3.7	Hph
	Thr (T66)/O γ 1	2.7	Halogen bond
3,5-diCl-salo with α 4 helix of chain D	Lys (K116)/C ϵ	3.5	P
	Lys (K116)/NH	3.6	Hb
	Phe (F123)	3.1	Halogen- π
3,5-diCl-salo with C2 loop connecting α 3 to α 4 helices of chain D	Tyr (Y112)	3.2	Halogen- π
	Tyr (Y112)/O	3.2	π -polar

Table S5. Calculated molecular physicochemical pharmacokinetics properties of complexes **1–5** related to Lipinski's Rule of Five with the aid of Molinspiration property engine v2018.10.

Property	1	2	3	4	5
nON*	6	4	4	4	6
nOHNH**	0	0	0	0	0
miLogP	2.77	3.59	3.06	1.80	1.18
MW	505.01	> 500	505.54	398.74	422.81
TPSA	43.41	36.94	36.94	36.94	55.40
natoms	29	23	23	21	23
nrotb	6	0	0	0	0
volume	438.76	351.33	333.94	289.60	330.83
Nviolations***	1	1	1	0	0

*Hydrogen Bond Acceptors (HBA) (the sum of Os and Ns)

**Hydrogen Bond Donors (HBD)(the sum of OHs andNHs)

***Number of violations according to Lipinski's rule validation

Table S6. Determination of drug-likeness score of complexes **1–5** through molinspiration bioactivity score v2018.03.

Properties	1	2	3	4	5
GPCR	0.20	0.03	0.07	0.34	0.17
Ion channel modulator	0.09	−0.21	−0.05	0.25	0.17
Kinase inhibitor	−0.02	−0.25	−0.12	0.21	0.01
Nuclear receptor ligand	−0.03	0.11	−0.02	0.35	0.22
Protease inhibitor	0.23	0.04	0.07	0.53	0.30
Enzyme inhibitor	0.10	0.04	0.08	0.38	0.31

Table S7. Rat acute toxicity predicted by GUSAR (on the Basis of PASS Prediction) for complexes 1–5.

Acute rat toxicity prediction parameters	1	2	3	4	5
Rat LD ₅₀ values					
Rat IP^a LD₅₀ (mg/kg)	277,900 in AD	877,700 in AD	11,940 out of AD	289,400 in AD	946,500 in AD
Rat IV^b LD₅₀ (mg/kg)	77,030 in AD	85,770 in AD	64,290 in AD	77,660 in AD	94,720 in AD
Rat Oral^c LD₅₀ (mg/kg)	1509,000 in AD	2105,000 in AD	3613,000 out of AD	221,200 out of AD	2245,000 in AD
Rat SC^d LD₅₀ (mg/kg)	598,300 in AD	1096,000 in AD	1370,000 in AD	1510,000 in AD	2363,000 in AD
Acute rodent toxicity classification of compounds by OECD project					
Rat IP LD₅₀ Classification	Class 4 in AD	Class 5 in AD	Class 3 out of AD	Class 4 in AD	Class 5 in AD
Rat IV LD₅₀ Classification	Class 4 in AD	Class 4 in AD	Class 4 in AD	Class 4 in AD	Class 4 in AD
Rat Oral LD₅₀ Classification	Class 4 in AD	Class 5 in AD	Class 5 out of AD	Class 3 out of AD	Class 5 in AD
Rat SC LD₅₀ Classification	Class 4 in AD	Class 5 in AD	Class 5 in AD	Class 5 in AD	Class 5 in AD

^a IP - Intraperitoneal route of administration

^b IV –Intravenous route of administration

^c Oral –Oral route of administration

^d SC –Subcutaneous route of administration

in AD - compound falls in the applicability domain of the model

out of AD - compound is out of the applicability domain of the model

Table S8. Substrate/Metabolite specificity Prediction (SMP) for complexes **1–5**.**Complex 1****Pa > Pi****Substrate based prediction result**

Pa	Pi	Enzyme
0.461	0.137	2A6
0.464	0.164	2C8
0.412	0.141	2B6
0.384	0.166	2E1
0.343	0.158	3A4
0.329	0.230	1A1
0.206	0.112	Aldoketoreductase
0.270	0.202	2C19
0.252	0.219	2D6

Metabolite based prediction result

Pa	Pi	Enzyme
0.497	0.113	2C19
0.452	0.107	UGT2B7
0.406	0.116	UGT2B4
0.368	0.111	UGT2B10
0.386	0.173	3A4
0.355	0.167	2D6
0.285	0.166	UGT2B17
0.209	0.128	Aldoketoreductase
0.249	0.225	2B6
0.246	0.231	2A6

Complex 2**Pa > Pi****Substrate based prediction result**

Pa	Pi	Enzyme
0.529	0.102	2A6
0.515	0.099	2B6
0.261	0.064	Aldoketoreductase

0.381	0.245	2C8
0.334	0.223	2E1

Metabolite based prediction result

Pa	Pi	Enzyme
0.377	0.093	UGT2B10
0.276	0.071	Aldoketoreductase
0.318	0.172	2B6
0.325	0.200	UGT1A4
0.314	0.223	3A4
0.303	0.215	2D6
0.292	0.210	UGT2B4
0.270	0.191	UGT1A6
0.284	0.225	UGT2B7
0.227	0.193	2E1
0.234	0.232	UGT2B17
0.241	0.239	2A6

Complex 3

Pa > Pi

Substrate based prediction result

Pa	Pi	Enzyme
0.505	0.111	2E1
0.406	0.175	2A6
0.399	0.219	2C8
0.356	0.176	2B6
0.232	0.089	Aldoketoreductase

Metabolite based prediction result

Pa	Pi	Enzyme
0.390	0.073	UGT2B10
0.387	0.132	UGT2B4
0.248	0.091	Aldoketoreductase
0.324	0.202	UGT1A4
0.309	0.199	UGT2B7
0.295	0.186	2B6

0.280	0.190	2A6
0.268	0.187	UGT2B17
0.268	0.193	UGT1A6
0.239	0.182	2E1

Complex 4

Pa > Pi

Substrate based prediction result

Pa	Pi	Enzyme
0.425	0.119	3A4
0.267	0.205	2C19

Metabolite based prediction result

Pa	Pi	Enzyme
0.457	0.134	2C19
0.450	0.141	3A4
0.433	0.201	2C9
0.315	0.196	UGT1A9
0.315	0.217	UGT2B10

Complex 5

Pa > Pi

Substrate based prediction result

Pa	Pi	Enzyme
0.431	0.188	2C8
0.373	0.138	3A4
0.230	0.091	Aldoketoreductase
0.310	0.222	2B6
0.289	0.266	2E1
0.304	0.282	2A6

Metabolite based prediction result

Pa	Pi	Enzyme
0.400	0.062	UGT2B10

0.431	0.098	UGT2B4
0.343	0.118	UGT2B17
0.376	0.179	3A4
0.254	0.087	Aldoketoreductase
0.295	0.168	2C8
0.314	0.194	UGT2B7
0.246	0.164	UGT2B15
0.287	0.252	UGT1A4
0.238	0.222	UGT1A6

Table S9. ROSC–Pred: Rodent Organ–Specific Carcinogenicity Prediction for complexes **1–5**.

Complex 1

Pa > Pi

The structure is out of the applicability domain. Percentage of new MNA descriptors: **35.5 %**

Rats					
Male			Female		
Pa	Pi	Organs	Pa	Pi	Organs
0.528	0.059	vascular system	0.520	0.237	uterus
0.526	0.155	liver	0.389	0.112	vascular system
0.413	0.186	all tumor bearing animals	0.453	0.353	hematopoietic system
0.459	0.276	hematopoietic system	0.272	0.258	nasal cavity
0.352	0.254	nasal cavity			
0.383	0.339	thyroid gland			
0.168	0.160	esophagus			
Mice					
Male			Female		
Pa	Pi	Organs	Pa	Pi	Organs
0.396	0.301	lung	0.460	0.090	pituitary gland

Complex 2

The structure is out of the applicability domain. Percentage of new MNA descriptors: **56 %**

Rats					
Male			Female		
Pa	Pi	Organs	Pa	Pi	Organs
0.765	0.043	stomach	0.807	0.051	stomach
0.777	0.127	kidney	0.621	0.063	kidney
0.659	0.073	hematopoietic system	0.471	0.092	vascular system
0.549	0.106	oral cavity	0.450	0.078	nasal cavity
0.482	0.059	large intestine	0.560	0.228	hematopoietic system
0.508	0.099	nasal cavity	0.527	0.223	uterus
0.460	0.083	vascular system	0.433	0.190	liver
0.529	0.164	thyroid gland	0.291	0.086	oral cavity
0.520	0.160	liver	0.362	0.246	thyroid gland
0.273	0.160	lung	0.292	0.186	mammary gland
			0.309	0.251	lung
Mice					
Male			Female		
Pa	Pi	Organs	Pa	Pi	Organs
0.904	0.006	stomach	0.730	0.013	lung

0.717	0.028	kidney	0.753	0.041	stomach
0.627	0.059	lung	0.566	0.027	pituitary gland
0.383	0.238	vascular system	0.576	0.145	hematopoietic system
0.117	0.018	small intestine	0.216	0.079	peritoneal cavity
			0.361	0.232	ovary
			0.381	0.262	liver
			0.117	0.018	small intestine
			0.399	0.382	urinary bladder

Complex 3

The structure is out of the applicability domain. Percentage of new MNA descriptors: **44 %**

Rats					
Male			Female		
Pa	Pi	Organs	Pa	Pi	Organs
0.629	0.072	liver	0.272	0.150	vascular system
0.501	0.230	hematopoietic system	0.451	0.364	uterus
0.365	0.153	vascular system	0.437	0.373	hematopoietic system
0.454	0.370	kidney	0.332	0.305	stomach
0.313	0.272	oral cavity			
0.368	0.358	thyroid gland			
Mice					
Male			Female		
Pa	Pi	Organs	Pa	Pi	Organs
0.901	0.015	liver	0.904	0.020	liver
0.525	0.195	stomach	0.643	0.038	lung
0.099	0.037	small intestine	0.478	0.069	pituitary gland
			0.473	0.176	stomach
			0.183	0.111	peritoneal cavity
			0.099	0.037	small intestine

Complex 4

The structure is out of the applicability domain. Percentage of new MNA descriptors: **56 %**

Rats					
Male			Female		
Pa	Pi	Organs	Pa	Pi	Organs
0.598	0.124	hematopoietic system	0.471	0.092	vascular system
0.460	0.083	vascular system	0.560	0.228	hematopoietic system
0.499	0.196	thyroid gland	0.527	0.223	uterus
0.574	0.299	kidney	0.450	0.251	kidney
0.475	0.212	liver	0.371	0.176	lung
0.420	0.175	nasal cavity	0.390	0.234	liver
0.393	0.237	stomach	0.323	0.171	nasal cavity
0.269	0.168	lung	0.376	0.260	stomach

0.301	0.287	oral cavity			
Mice					
Male			Female		
Pa	Pi	Organs	Pa	Pi	Organs
0.628	0.138	stomach	0.660	0.100	stomach
0.475	0.205	lung	0.566	0.027	pituitary gland
0.383	0.238	vascular system	0.542	0.171	hematopoietic system
0.117	0.018	small intestine	0.216	0.079	peritoneal cavity
			0.361	0.232	ovary
			0.402	0.279	lung
			0.117	0.018	small intestine
			0.399	0.382	urinary bladder

Complex 5

The structure is out of the applicability domain. Percentage of new MNA descriptors: **29.6 %**

Rats					
Male			Female		
Pa	Pi	Organs	Pa	Pi	Organs
0.382	0.135	vascular system	0.243	0.163	vascular system
0.466	0.269	hematopoietic system	0.439	0.370	hematopoietic system
0.429	0.267	liver	0.269	0.263	nasal cavity
Mice					
Male			Female		
Pa	Pi	Organs	Pa	Pi	Organs
0.508	0.207	stomach	0.491	0.221	hematopoietic system
0.365	0.348	lung	0.408	0.149	pituitary gland

Table S10. Quantitative prediction of anti–target interaction profiles for complexes**1–5**.Quantitative prediction of anti–target interaction profiles for complex **1**

Activity	Prediction Value, - Log10(Value), Mole	Applicability Domain
5-hydroxytryptamine 1B receptor antagonist IC50	5,885	Out of AD
5-hydroxytryptamine 1B receptor antagonist Ki	6,831	In AD
5-hydroxytryptamine 2A receptor antagonist IC50	7,379	Out of AD
5-hydroxytryptamine 2A receptor antagonist Ki	6,364	Out of AD
5-hydroxytryptamine 2C receptor antagonist IC50	6,469	In AD
5-hydroxytryptamine 2C receptor antagonist Ki	6,890	Out of AD
alpha1a adrenergic receptor antagonist IC50	6,031	Out of AD
alpha1a adrenergic receptor antagonist Ki	6,755	Out of AD
alpha1b adrenergic receptor antagonist Ki	6,698	Out of AD
Alpha-2A adrenergic receptor antagonist IC50	6,033	In AD
Alpha-2A adrenergic receptor antagonist Ki	6,180	In AD
amine oxidase [flavin-containing] A inhibitor IC50	5,456	In AD
amine oxidase [flavin-containing] A inhibitor Ki	5,519	In AD
androgen receptor antagonist IC50	5,515	In AD
carbonic anhydrase I activator Kact	8,372	In AD
carbonic anhydrase I inhibitor Ki	7,359	In AD
Carbonic anhydrase 2 activator Kact	8,713	In AD
carbonic anhydrase II inhibitor Ki	7,707	Out of AD
D(1A) dopamine receptor antagonist IC50	4,772	In AD
D(1A) dopamine receptor antagonist Ki	5,692	In AD
D3 dopamine receptor antagonist Ki	6,387	Out of AD
delta-type opioid receptor antagonist Ki	5,951	Out of AD
estrogen receptor antagonist IC50	6,171	In AD
estrogen receptor antagonist Ki	6,669	In AD
kappa-type opioid receptor antagonist Ki	5,483	Out of AD
mu-type opioid receptor antagonist IC50	5,354	In AD
mu-type opioid receptor antagonist Ki	5,456	In AD
sodium- and chloride-dependent GABA transporter 1 antagonist IC50	4,454	In AD
sodium-dependent dopamine transporter antagonist IC50	5,470	Out of AD
sodium-dependent dopamine transporter antagonist Ki	5,927	In AD
sodium-dependent serotonin transporter antagonist IC50	5,279	Out of AD
sodium-dependent serotonin transporter antagonist Ki	6,223	Out of AD

The total number of anti–target(s): 8

in AD – compound falls in the applicability domain of the model

out of AD –compound is out of the applicability domain of the model

Quantitative prediction of anti-target interaction profiles for chemical complex 2

Activity	Prediction Value, - Log10(Value), Mole	Applicability Domain
5-hydroxytryptamine 1B receptor antagonist IC50	4,752	Out of AD
5-hydroxytryptamine 1B receptor antagonist Ki	6,073	Out of AD
5-hydroxytryptamine 2A receptor antagonist IC50	7,070	Out of AD
5-hydroxytryptamine 2A receptor antagonist Ki	8,043	Out of AD
5-hydroxytryptamine 2C receptor antagonist IC50	7,272	In AD
5-hydroxytryptamine 2C receptor antagonist Ki	7,388	Out of AD
alpha1a adrenergic receptor antagonist IC50	5,423	Out of AD
alpha1a adrenergic receptor antagonist Ki	5,766	Out of AD
alpha1b adrenergic receptor antagonist Ki	6,597	Out of AD
Alpha-2A adrenergic receptor antagonist IC50	5,319	In AD
Alpha-2A adrenergic receptor antagonist Ki	6,141	Out of AD
amine oxidase [flavin-containing] A inhibitor IC50	5,706	In AD
amine oxidase [flavin-containing] A inhibitor Ki	4,629	In AD
androgen receptor antagonist IC50	5,792	In AD
carbonic anhydrase I activator Kact	8,600	In AD
carbonic anhydrase I inhibitor Ki	7,570	Out of AD
Carbonic anhydrase 2 activator Kact	8,985	In AD
carbonic anhydrase II inhibitor Ki	8,950	Out of AD
D(1A) dopamine receptor antagonist IC50	5,593	In AD
D(1A) dopamine receptor antagonist Ki	6,319	In AD
D3 dopamine receptor antagonist Ki	5,337	Out of AD
delta-type opioid receptor antagonist Ki	5,921	Out of AD
estrogen receptor antagonist IC50	6,077	In AD
estrogen receptor antagonist Ki	6,495	In AD
kappa-type opioid receptor antagonist Ki	5,192	Out of AD
mu-type opioid receptor antagonist IC50	6,073	Out of AD
mu-type opioid receptor antagonist Ki	6,623	Out of AD
sodium- and chloride-dependent GABA transporter 1 antagonist IC50	4,084	Out of AD
sodium-dependent dopamine transporter antagonist IC50	6,221	Out of AD
sodium-dependent dopamine transporter antagonist Ki	5,592	Out of AD
sodium-dependent serotonin transporter antagonist IC50	6,470	Out of AD
sodium-dependent serotonin transporter antagonist Ki	6,129	Out of AD

The total number of anti-target(s): 6

in AD – compound falls in the applicability domain of the model

out of AD – compound is out of the applicability domain of the model

Quantitative prediction of anti–target interaction profiles for chemical complex 3

Activity	Prediction Value, - Log10(Value), Mole	Applicability Domain
5-hydroxytryptamine 1B receptor antagonist IC50	5,498	Out of AD
5-hydroxytryptamine 1B receptor antagonist Ki	6,635	In AD
5-hydroxytryptamine 2A receptor antagonist IC50	7,011	Out of AD
5-hydroxytryptamine 2A receptor antagonist Ki	6,637	Out of AD
5-hydroxytryptamine 2C receptor antagonist IC50	7,394	In AD
5-hydroxytryptamine 2C receptor antagonist Ki	6,946	Out of AD
alpha1a adrenergic receptor antagonist IC50	5,659	Out of AD
alpha1a adrenergic receptor antagonist Ki	5,886	Out of AD
alpha1b adrenergic receptor antagonist Ki	6,998	Out of AD
Alpha-2A adrenergic receptor antagonist IC50	5,608	Out of AD
Alpha-2A adrenergic receptor antagonist Ki	6,058	In AD
amine oxidase [flavin-containing] A inhibitor IC50	5,719	In AD
amine oxidase [flavin-containing] A inhibitor Ki	5,515	In AD
androgen receptor antagonist IC50	5,686	In AD
carbonic anhydrase I activator Kact	6,717	In AD
carbonic anhydrase I inhibitor Ki	7,197	Out of AD
Carbonic anhydrase 2 activator Kact	8,809	In AD
carbonic anhydrase II inhibitor Ki	8,728	Out of AD
D(1A) dopamine receptor antagonist IC50	5,122	In AD
D(1A) dopamine receptor antagonist Ki	6,618	In AD
D3 dopamine receptor antagonist Ki	6,016	Out of AD
delta-type opioid receptor antagonist Ki	5,524	Out of AD
estrogen receptor antagonist IC50	5,862	In AD
estrogen receptor antagonist Ki	5,697	In AD
kappa-type opioid receptor antagonist Ki	5,976	Out of AD
mu-type opioid receptor antagonist IC50	4,855	Out of AD
mu-type opioid receptor antagonist Ki	5,934	Out of AD
sodium- and chloride-dependent GABA transporter 1 antagonist IC50	4,196	In AD
sodium-dependent dopamine transporter antagonist IC50	6,318	Out of AD
sodium-dependent dopamine transporter antagonist Ki	6,185	Out of AD
sodium-dependent serotonin transporter antagonist IC50	5,480	Out of AD
sodium-dependent serotonin transporter antagonist Ki	6,222	Out of AD

The total number of anti–target(s): 8

in AD – compound falls in the applicability domain of the model

out of AD – compound is out of the applicability domain of the model

Quantitative prediction of anti–target interaction profiles for chemical complex 4

Activity	Prediction Value, - Log10(Value), Mole	Applicability Domain
5-hydroxytryptamine 1B receptor antagonist IC50	5,711	Out of AD
5-hydroxytryptamine 1B receptor antagonist Ki	5,911	In AD
5-hydroxytryptamine 2A receptor antagonist IC50	7,301	Out of AD
5-hydroxytryptamine 2A receptor antagonist Ki	6,965	In AD
5-hydroxytryptamine 2C receptor antagonist IC50	7,214	In AD
5-hydroxytryptamine 2C receptor antagonist Ki	6,703	Out of AD
alpha1a adrenergic receptor antagonist IC50	5,885	Out of AD
alpha1a adrenergic receptor antagonist Ki	5,629	Out of AD
alpha1b adrenergic receptor antagonist Ki	7,085	Out of AD
Alpha-2A adrenergic receptor antagonist IC50	5,451	In AD
Alpha-2A adrenergic receptor antagonist Ki	5,995	In AD
amine oxidase [flavin-containing] A inhibitor IC50	5,310	In AD
amine oxidase [flavin-containing] A inhibitor Ki	5,727	In AD
androgen receptor antagonist IC50	6,050	Out of AD
carbonic anhydrase I activator Kact	8,431	In AD
carbonic anhydrase I inhibitor Ki	7,962	Out of AD
Carbonic anhydrase 2 activator Kact	8,896	In AD
carbonic anhydrase II inhibitor Ki	8,220	Out of AD
D(1A) dopamine receptor antagonist IC50	5,293	In AD
D(1A) dopamine receptor antagonist Ki	6,704	In AD
D3 dopamine receptor antagonist Ki	5,900	Out of AD
delta-type opioid receptor antagonist Ki	5,441	Out of AD
estrogen receptor antagonist IC50	5,555	In AD
estrogen receptor antagonist Ki	6,123	In AD
kappa-type opioid receptor antagonist Ki	5,600	Out of AD
mu-type opioid receptor antagonist IC50	5,044	In AD
mu-type opioid receptor antagonist Ki	6,038	Out of AD
sodium- and chloride-dependent GABA transporter 1 antagonist IC50	4,637	In AD
sodium-dependent dopamine transporter antagonist IC50	5,629	Out of AD
sodium-dependent dopamine transporter antagonist Ki	6,919	Out of AD
sodium-dependent serotonin transporter antagonist IC50	5,586	Out of AD
sodium-dependent serotonin transporter antagonist Ki	7,099	Out of AD

The total number of anti–target(s): 7

in AD – compound falls in the applicability domain of the model

out of AD – compound is out of the applicability domain of the model

Quantitative prediction of anti–target interaction profiles for chemical complex 5

Activity	Prediction Value, - Log10(Value), Mole	Applicability Domain
5-hydroxytryptamine 1B receptor antagonist IC50	4,531	Out of AD
5-hydroxytryptamine 1B receptor antagonist Ki	6,274	In AD
5-hydroxytryptamine 2A receptor antagonist IC50	6,801	Out of AD
5-hydroxytryptamine 2A receptor antagonist Ki	5,995	In AD
5-hydroxytryptamine 2C receptor antagonist IC50	7,191	In AD
5-hydroxytryptamine 2C receptor antagonist Ki	6,325	Out of AD
alpha1a adrenergic receptor antagonist IC50	6,131	Out of AD
alpha1a adrenergic receptor antagonist Ki	6,698	Out of AD
alpha1b adrenergic receptor antagonist Ki	7,103	Out of AD
Alpha-2A adrenergic receptor antagonist IC50	5,845	In AD
Alpha-2A adrenergic receptor antagonist Ki	5,949	In AD
amine oxidase [flavin-containing] A inhibitor IC50	5,212	In AD
amine oxidase [flavin-containing] A inhibitor Ki	6,591	In AD
androgen receptor antagonist IC50	6,040	Out of AD
carbonic anhydrase I activator Kact	5,491	Out of AD
carbonic anhydrase I inhibitor Ki	8,029	Out of AD
Carbonic anhydrase 2 activator Kact	7,539	In AD
carbonic anhydrase II inhibitor Ki	7,769	Out of AD
D(1A) dopamine receptor antagonist IC50	4,978	In AD
D(1A) dopamine receptor antagonist Ki	6,257	In AD
D3 dopamine receptor antagonist Ki	5,998	In AD
delta-type opioid receptor antagonist Ki	5,432	Out of AD
estrogen receptor antagonist IC50	5,703	In AD
estrogen receptor antagonist Ki	8,188	In AD
kappa-type opioid receptor antagonist Ki	5,929	Out of AD
mu-type opioid receptor antagonist IC50	4,777	In AD
mu-type opioid receptor antagonist Ki	6,191	Out of AD
sodium- and chloride-dependent GABA transporter 1 antagonist IC50	4,603	In AD
sodium-dependent dopamine transporter antagonist IC50	6,015	Out of AD
sodium-dependent dopamine transporter antagonist Ki	5,647	Out of AD
sodium-dependent serotonin transporter antagonist IC50	5,615	Out of AD
sodium-dependent serotonin transporter antagonist Ki	5,789	Out of AD

The total number of anti–target(s): 8

in AD – compound falls in the applicability domain of the model

out of AD – compound is out of the applicability domain of the model

Table S11. Environmental ecotoxicity prediction for complexes **1–5** by GUSAR.

Complex 1		
Activity	Prediction Value	Applicability Domain
Bioaccumulation factor Log10(BCF)	1,172	In AD
Daphnia magna LC50 -Log10(mol/L)	5,091	In AD
Fathead Minnow LC50 Log10(mmol/L)	-3,487	In AD
Tetrahymena pyriformis IGC50 -Log10(mol/L)	1,265	In AD
Complex 2		
Activity	Prediction Value	Applicability Domain
Bioaccumulation factor Log10(BCF)	1,568	In AD
Daphnia magna LC50 -Log10(mol/L)	5,274	In AD
Fathead Minnow LC50 Log10(mmol/L)	-3,857	In AD
Tetrahymena pyriformis IGC50 -Log10(mol/L)	1,790	In AD
Complex 3		
Activity	Prediction Value	Applicability Domain
Bioaccumulation factor Log10(BCF)	2,231	In AD
Daphnia magna LC50 -Log10(mol/L)	5,084	In AD
Fathead Minnow LC50 Log10(mmol/L)	-3,606	In AD
Tetrahymena pyriformis IGC50 -Log10(mol/L)	1,985	In AD
Complex 4		
Activity	Prediction Value	Applicability Domain
Bioaccumulation factor Log10(BCF)	0,000	0,853
Daphnia magna LC50 -Log10(mol/L)	0,000	0,853
Fathead Minnow LC50 Log10(mmol/L)	0,000	0,853
Tetrahymena pyriformis IGC50 -Log10(mol/L)	0,000	0,853
Complex 5		
Activity	Prediction Value	Applicability Domain
Bioaccumulation factor Log10(BCF)	1,095	In AD
Daphnia magna LC50 -Log10(mol/L)	4,243	In AD
Fathead Minnow LC50 Log10(mmol/L)	-2,169	In AD
Tetrahymena pyriformis IGC50 -Log10(mol/L)	0,869	In AD

in AD – compound falls in the applicability domain of the model

out of AD – compound is out of the applicability domain of the model

Table S12. CLC–Pred: *in silico* prediction of cytotoxicity for tumor and non-tumor cell lines (results for $P_a > 0.3$, $P_a > 0.5$, and $P_a > P_i$). P_a : probability “to be active”, P_i : probability “to be inactive”.

Complex 1

Cancer cell line prediction result

$P_a > 0.3$

P_a	P_i	Cell-line	Cell-line full name	Tissue	Tumor type
0.474	0.027	<u>HepG2</u>	Hepatoblastoma	Liver	Hepatoblastoma
0.475	0.037	<u>HT-29</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.474	0.070	<u>Hs 683</u>	Oligodendroglioma	Brain	Glioma
0.464	0.073	<u>NCI-H838</u>	Non-small cell lung cancer. 3 stage	Lung	Carcinoma
0.360	0.043	<u>HOP-18</u>	Non-small cell lung carcinoma	Lung	Carcinoma
0.321	0.034	<u>MKN-7</u>	Gastric carcinoma	Stomach	Carcinoma
0.402	0.132	<u>DMS-114</u>	Lung carcinoma	Lung	Carcinoma
0.387	0.122	<u>MDA-MB-453</u>	Breast adenocarcinoma	Breast	Adenocarcinoma
0.319	0.075	<u>T98G</u>	Glioblastoma	Brain	Carcinoma
0.307	0.076	<u>8505C</u>	Thyroid gland undifferentiated (anaplastic) carcinoma	Thyroid	Carcinoma
0.306	0.275	<u>SK-MEL-1</u>	Metastatic melanoma	Skin	Melanoma

$P_a > P_i$

P_a	P_i	Cell-line	Cell-line full name	Tissue	Tumor type
0.474	0.027	<u>HepG2</u>	Hepatoblastoma	Liver	Hepatoblastoma
0.475	0.037	<u>HT-29</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.474	0.070	<u>Hs 683</u>	Oligodendroglioma	Brain	Glioma
0.464	0.073	<u>NCI-H838</u>	Non-small cell lung cancer. 3 stage	Lung	Carcinoma
0.360	0.043	<u>HOP-18</u>	Non-small cell lung carcinoma	Lung	Carcinoma
0.321	0.034	<u>MKN-7</u>	Gastric carcinoma	Stomach	Carcinoma
0.402	0.132	<u>DMS-114</u>	Lung carcinoma	Lung	Carcinoma
0.387	0.122	<u>MDA-MB-453</u>	Breast adenocarcinoma	Breast	Adenocarcinoma
0.319	0.075	<u>T98G</u>	Glioblastoma	Brain	Carcinoma
0.307	0.076	<u>8505C</u>	Thyroid gland undifferentiated (anaplastic) carcinoma	Thyroid	Carcinoma
0.222	0.011	<u>U-937/GTB</u>	Histiocytic lymphoma	Blood	Lymphoma
0.204	0.004	<u>SK-HEP1</u>	Hepatocellular carcinoma	Liver	Carcinoma
0.277	0.094	<u>H9</u>	T-lymphoid	Haematopoietic and lymphoid tissue	Leukemia
0.278	0.107	<u>HOS</u>	Osteosarcoma	Bone	Sarcoma
0.173	0.003	<u>MEXF276L</u>	Xenograft melanoma	Skin	Melanoma
0.173	0.003	<u>MEXF989</u>	Xenograft melanoma	Skin	Melanoma
0.173	0.003	<u>PAXF546</u>	Pancreatic carcinoma	Pancreas	Carcinoma
0.190	0.045	<u>ADR5000</u>	Childhood T acute lymphoblastic leukemia	Blood	Leukemia

0.225	0.111	<u>MDA-MB-361</u>	Breast adenocarcinoma	Breast	Adenocarcinoma
0.247	0.141	<u>PC-6</u>	Small cell lung carcinoma	Lung	Carcinoma
0.096	0.003	<u>H322</u>	Lung carcinoma	Lung	Carcinoma
0.150	0.069	<u>DLD-1</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.184	0.108	<u>St-4</u>	Stomach carcinoma	Stomach	Carcinoma
0.207	0.133	<u>Raji</u>	B-lymphoblastic cells	Haematopoietic and lymphoid tissue	Leukemia
0.204	0.132	<u>M19-MEL</u>	Melanoma	Skin	Melanoma
0.159	0.089	<u>SHP77</u>	Small cell lung carcinoma	Lung	Carcinoma
0.271	0.203	<u>A2058</u>	Melanoma	Skin	Melanoma
0.168	0.101	<u>Caco-2</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.084	0.019	<u>UMSCC22B</u>	Hypopharyngeal squamous cell carcinoma	Upper aerodigestive tract	Carcinoma
0.104	0.044	<u>SQ20B</u>	Head and neck Squamous carcinoma	Head and neck	Carcinoma
0.065	0.006	<u>UCLA P-3</u>	Lung carcinoma cell line	Lung	Carcinoma
0.082	0.028	<u>FaDu</u>	Hypopharyngeal squamous carcinoma	Upper aerodigestive tract	Carcinoma
0.065	0.019	<u>UMUC3</u>	Bladder Carcinoma	Urinary tract	Carcinoma
0.132	0.089	<u>Caov-3</u>	High grade ovarian serous adenocarcinoma	Ovarium	Adenocarcinoma
0.277	0.245	<u>CFPAC-1</u>	Pancreatic carcinoma	Pancreas	Carcinoma
0.306	0.275	<u>SK-MEL-1</u>	Metastatic melanoma	Skin	Melanoma
0.096	0.064	<u>COLO 320</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.185	0.154	<u>HeLa</u>	Cervical adenocarcinoma	Cervix	Adenocarcinoma
0.027	0.003	<u>OVXF1023</u>	Ovarian adenocarcinoma	Ovarium	Adenocarcinoma
0.027	0.003	<u>OVXF1353</u>	Ovarian adenocarcinoma	Ovarium	Adenocarcinoma
0.027	0.003	<u>RXF 423</u>	Renal carcinoma	Kidney	Carcinoma
0.055	0.032	<u>Leukemia cells</u>	Leukemia	Blood	Leukemia
0.224	0.213	<u>NCI-H1299</u>	Non-small cell lung carcinoma	Lung	Carcinoma
0.015	0.004	<u>SW-60</u>	Colorectal carcinoma	Colon	Carcinoma
0.286	0.285	<u>NALM-6</u>	Adult B acute lymphoblastic leukemia	Haematopoietic and lymphoid tissue	Leukemia
0.020	0.019	<u>NT2</u>	Embryonal carcinoma	Germ cell. fibroblast	Carcinoma
0.017	0.016	<u>NCH82</u>	Glioblastoma	Brain	Glioblastoma

Non-tumor cell line prediction result

Pa > 0.3

Pa	Pi	Cell-line	Cell-line full name	Tissue
0.395	0.036	<u>WI-38 VA13</u>	Embryonic lung fibroblast	Lung

Pa > Pi

Pa	Pi	Cell-line	Cell-line full name	Tissue
0.395	0.036	<u>WI-38 VA13</u>	Embryonic lung fibroblast	Lung

0.277	0.008	<u>NHDF</u>	Fibroblast	Skin
0.223	0.004	<u>IMR-90</u>	Embryonic lung fibroblast	Lung
0.271	0.069	<u>MRC5</u>	Embryonic lung fibroblast	Lung
0.188	0.024	<u>PrEC</u>	Prostate epithelial cell	Prostate
0.110	0.058	<u>WI-38</u>	Embryonic lung fibroblast	Lung
0.029	0.009	<u>HASMC</u>	Aortic smooth muscle	Muscle
0.090	0.089	<u>HUVEC</u>	Umbilical vein endothelial cell	Endothelium

Complex 2

Cancer cell line prediction result

Pa > 0.5

Pa	Pi	Cell-line	Cell-line full name	Tissue	Tumor type
0.603	0.025	<u>Hs 683</u>	Oligodendroglioma	Brain	Glioma

Pa > Pi

Pa	Pi	Cell-line	Cell-line full name	Tissue	Tumor type
0.603	0.025	<u>Hs 683</u>	Oligodendroglioma	Brain	Glioma
0.404	0.029	<u>HOP-18</u>	Non-small cell lung carcinoma	Lung	Carcinoma
0.338	0.026	<u>MKN-7</u>	Gastric carcinoma	Stomach	Carcinoma
0.346	0.037	<u>SF-295</u>	Glioblastoma	Brain	Glioblastoma
0.268	0.028	<u>Jurkat</u>	Acute leukemic T-cells	Blood	Leukemia
0.381	0.152	<u>NCI-H838</u>	Non-small cell lung cancer. 3 stage	Lung	Carcinoma
0.178	0.003	<u>MEXF276L</u>	Xenograft melanoma	Skin	Melanoma
0.178	0.003	<u>MEXF989</u>	Xenograft melanoma	Skin	Melanoma
0.178	0.003	<u>PAXF546</u>	Pancreatic carcinoma	Pancreas	Carcinoma
0.173	0.005	<u>MOLT-3</u>	T-lymphoblastic leukemia	Blood	Leukemia
0.167	0.016	<u>COLO 320</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.194	0.043	<u>ADR5000</u>	Childhood T acute lymphoblastic leukemia	Blood	Leukemia
0.320	0.176	<u>NCI-H187</u>	Small cell lung carcinoma	Lung	Carcinoma
0.206	0.072	<u>St-4</u>	Stomach carcinoma	Stomach	Carcinoma
0.139	0.007	<u>Bcap37</u>	Breast adenocarcinoma	Breast	Adenocarcinoma
0.255	0.132	<u>PC-6</u>	Small cell lung carcinoma	Lung	Carcinoma
0.146	0.030	<u>HCT-8</u>	Ileocecal adenocarcinoma	Large intestine	Adenocarcinoma
0.114	0.009	<u>UMSCC22B</u>	Hypopharyngeal squamous cell carcinoma	Upper aerodigestive tract	Carcinoma
0.209	0.132	<u>HL-60</u>	Promyeloblast leukemia	Haematopoietic and lymphoid tissue	Leukemia
0.111	0.050	<u>MES-SA</u>	Uterine corpus sarcoma	Uterus	Sarcoma
0.063	0.004	<u>H322</u>	Lung carcinoma	Lung	Carcinoma
0.063	0.007	<u>UCLA P-3</u>	Lung carcinoma cell line	Lung	Carcinoma
0.218	0.177	<u>LS174T</u>	Colon adencocarcinoma	Colon	Adenocarcinoma

0.062	0.023	<u>Leukemia cells</u>	Leukemia	Blood	Leukemia
0.062	0.024	<u>UMUC3</u>	Bladder Carcinoma	Urinary tract	Carcinoma
0.209	0.180	<u>KM12</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.036	0.009	<u>KKLS</u>	Gastric adenocarcinoma	Stomach	Adenocarcinoma
0.238	0.212	<u>8505C</u>	Thyroid gland undifferentiated (anaplastic) carcinoma	Thyroid	Carcinoma
0.071	0.046	<u>FaDu</u>	Hypopharyngeal squamous carcinoma	Upper aerodigestive tract	Carcinoma
0.027	0.003	<u>OVXF1023</u>	Ovarian adenocarcinoma	Ovary	Adenocarcinoma
0.027	0.003	<u>OVXF1353</u>	Ovarian adenocarcinoma	Ovary	Adenocarcinoma
0.027	0.003	<u>RXF 423</u>	Renal carcinoma	Kidney	Carcinoma
0.069	0.047	<u>SISO</u>	Uterine cervical adenocarcinoma	Cervix	Adenocarcinoma
0.025	0.005	<u>NCI-H46</u>	Lung carcinoma	Lung	Carcinoma
0.022	0.003	<u>SW-60</u>	Colorectal carcinoma	Colon	Carcinoma
0.031	0.014	<u>GLC4</u>			
0.030	0.017	<u>SNB-7</u>	Glioblastoma	Brain	Glioblastoma
0.017	0.007	<u>SPC-A4</u>	Lung Adenocarcinoma	Lung	Adenocarcinoma
0.062	0.053	<u>SK-ES1</u>	Ewing sarcoma	Bone	Sarcoma
0.016	0.011	<u>ST-KM-1</u>	Gastric carcinoma	Stomach	Carcinoma

Non-tumor cell line prediction result

$P_a > P_i$

P_a	P_i	Cell-line	Cell-line full name	Tissue
0.499	0.022	<u>WI-38 VA13</u>	Embryonic lung fibroblast	Lung
0.336	0.005	<u>PBMC</u>	Peripheral blood mononuclear cell	Blood
0.205	0.005	<u>IMR-90</u>	Embryonic lung fibroblast	Lung
0.189	0.023	<u>PrEC</u>	Prostate epithelial cell	Prostate
0.191	0.048	<u>NHDF</u>	Fibroblast	Skin
0.205	0.118	<u>MRC5</u>	Embryonic lung fibroblast	Lung
0.082	0.026	<u>WIL2-NS</u>	Lymphoblastoid cell	Haematopoietic, lymphoid tissue
0.047	0.005	<u>TERT-RPE1</u>	Retinal pigmented epithelial cell	Retina
0.099	0.085	<u>WI-38</u>	Embryonic lung fibroblast	Lung
0.023	0.019	<u>HASMC</u>	Aortic smooth muscle	Muscle

Complex 3

Cancer cell line prediction result

$P_a > 0.5$

P_a	P_i	Cell-line	Cell-line full name	Tissue	Tumor type
0.645	0.017	<u>Hs 683</u>	Oligodendroglioma	Brain	Glioma

0.516	0.012	<u>NCI-H187</u>	Small cell lung carcinoma	Lung	Carcinoma
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Pa > Pi

Pa	Pi	Cell-line	Cell-line full name	Tissue	Tumor type
0.645	0.017	<u>Hs 683</u>	Oligodendroglioma	Brain	Glioma
0.516	0.012	<u>NCI-H187</u>	Small cell lung carcinoma	Lung	Carcinoma
0.438	0.021	<u>HOP-18</u>	Non-small cell lung carcinoma	Lung	Carcinoma
0.330	0.030	<u>MKN-7</u>	Gastric carcinoma	Stomach	Carcinoma
0.295	0.063	<u>HepG2</u>	Hepatoblastoma	Liver	Hepatoblastoma
0.381	0.152	<u>NCI-H838</u>	Non-small cell lung cancer. 3 stage	Lung	Carcinoma
0.189	0.011	<u>COLO 320</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.178	0.003	<u>MEXF276L</u>	Xenograft melanoma	Skin	Melanoma
0.178	0.003	<u>MEXF989</u>	Xenograft melanoma	Skin	Melanoma
0.178	0.003	<u>PAXF546</u>	Pancreatic carcinoma	Pancreas	Carcinoma
0.194	0.043	<u>ADR5000</u>	Childhood T acute lymphoblastic leukemia	Blood	Leukemia
0.255	0.132	<u>PC-6</u>	Small cell lung carcinoma	Lung	Carcinoma
0.190	0.097	<u>St-4</u>	Stomach carcinoma	Stomach	Carcinoma
0.253	0.169	<u>8505C</u>	Thyroid gland undifferentiated (anaplastic) carcinoma	Thyroid	Carcinoma
0.092	0.015	<u>UMSCC22B</u>	Hypopharyngeal squamous cell carcinoma	Upper aerodigestive tract	Carcinoma
0.227	0.154	<u>LS174T</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.063	0.004	<u>H322</u>	Lung carcinoma	Lung	Carcinoma
0.063	0.007	<u>UCLA P-3</u>	Lung carcinoma cell line	Lung	Carcinoma
0.156	0.107	<u>NUGC-3</u>	Gastric carcinoma	Stomach	Carcinoma
0.064	0.020	<u>Leukemia cells</u>	Leukemia	Blood	Leukemia
0.074	0.041	<u>FaDu</u>	Hypopharyngeal squamous carcinoma	Upper aerodigestive tract	Carcinoma
0.060	0.030	<u>UMUC3</u>	Bladder Carcinoma	Urinary tract	Carcinoma
0.071	0.041	<u>SISO</u>	Uterine cervical adenocarcinoma	Cervix	Adenocarcinoma
0.036	0.009	<u>KKLS</u>	Gastric adenocarcinoma	Stomach	Adenocarcinoma
0.092	0.066	<u>Bcap37</u>	Breast adenocarcinoma	Breast	Adenocarcinoma
0.029	0.004	<u>NCI-H46</u>	Lung carcinoma	Lung	Carcinoma
0.027	0.003	<u>OVXF1023</u>	Ovarian adenocarcinoma	Ovary	Adenocarcinoma
0.027	0.003	<u>OVXF1353</u>	Ovarian adenocarcinoma	Ovary	Adenocarcinoma
0.027	0.003	<u>RXF 423</u>	Renal carcinoma	Kidney	Carcinoma
0.022	0.003	<u>SW-60</u>	Colorectal carcinoma	Colon	Carcinoma
0.031	0.014	<u>GLC4</u>			
0.063	0.049	<u>SW1353</u>	Bone chondrosarcoma	Bone	Sarcoma
0.023	0.010	<u>NUGC</u>	Gastric carcinoma	Stomach	Carcinoma
0.030	0.017	<u>SNB-7</u>	Glioblastoma	Brain	Glioblastoma
0.062	0.053	<u>SK-ES1</u>	Ewing sarcoma	Bone	Sarcoma
0.059	0.052	<u>HPAC</u>	Pancreatic adenocarcinoma	Pancreas	Adenocarcinoma
0.016	0.011	<u>ST-KM-1</u>	Gastric carcinoma	Stomach	Carcinoma

Non-tumor cell line prediction result

Pa > Pi

Pa	Pi	Cell-line	Cell-line full name	Tissue
0.445	0.029	<u>WI-38 VA13</u>	Embryonic lung fibroblast	Lung
0.196	0.008	<u>IMR-90</u>	Embryonic lung fibroblast	Lung
0.175	0.033	<u>PrEC</u>	Prostate epithelial cell	Prostate
0.152	0.087	<u>NHDF</u>	Fibroblast	Skin
0.078	0.032	<u>WIL2-NS</u>	Lymphoblastoid cell	Haematopoietic, lymphoid tissue
0.044	0.007	<u>TERT-RPE1</u>	Retinal pigmented epithelial cell	Retina
0.025	0.014	<u>HASMC</u>	Aortic smooth muscle	Muscle

Complex 4**Cancer cell line prediction result****Pa > 0.5**

Pa	Pi	Cell-line	Cell-line full name	Tissue	Tumor type
0.603	0.004	<u>PA-1</u>	Ovarian carcinoma	Ovarium	Carcinoma
0.585	0.029	<u>Hs 683</u>	Oligodendroglioma	Brain	Glioma

Pa > Pi

Pa	Pi	Cell-line	Cell-line full name	Tissue	Tumor type
0.603	0.004	<u>PA-1</u>	Ovarian carcinoma	Ovarium	Carcinoma
0.585	0.029	<u>Hs 683</u>	Oligodendroglioma	Brain	Glioma
0.427	0.009	<u>DLD-1</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.420	0.042	<u>HL-60</u>	Promyeloblast leukemia	Haematopoietic and lymphoid tissue	Leukemia
0.363	0.018	<u>MKN-7</u>	Gastric carcinoma	Stomach	Carcinoma
0.343	0.014	<u>C8166</u>	Leukemic T-cells	Blood	Leukemia
0.352	0.047	<u>HOP-18</u>	Non-small cell lung carcinoma	Lung	Carcinoma
0.302	0.072	<u>UO-31</u>	Renal carcinoma	Kidney	Carcinoma
0.241	0.031	<u>St-4</u>	Stomach carcinoma	Stomach	Carcinoma
0.360	0.178	<u>NCI-H838</u>	Non-small cell lung cancer. 3 stage	Lung	Carcinoma
0.156	0.004	<u>MEXF276L</u>	Xenograft melanoma	Skin	Melanoma
0.156	0.004	<u>MEXF989</u>	Xenograft melanoma	Skin	Melanoma
0.156	0.004	<u>PAXF546</u>	Pancreatic carcinoma	Pancreas	Carcinoma
0.360	0.210	<u>DMS-114</u>	Lung carcinoma	Lung	Carcinoma
0.249	0.130	<u>Hs-578T</u>	Invasive ductal breast carcinoma	Breast	Carcinoma
0.142	0.025	<u>COLO 320</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.169	0.063	<u>ADR5000</u>	Childhood T acute lymphoblastic leukemia	Blood	Leukemia
0.118	0.024	<u>SiHa</u>	Cervical squamous cell	Cervix	Carcinoma

			carcinoma		
0.166	0.104	<u>Caco-2</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.246	0.190	<u>8505C</u>	Thyroid gland undifferentiated (anaplastic) carcinoma	Thyroid	Carcinoma
0.072	0.028	<u>UMSCC22B</u>	Hypopharyngeal squamous cell carcinoma	Upper aerodigestive tract	Carcinoma
0.049	0.006	<u>H322</u>	Lung carcinoma	Lung	Carcinoma
0.092	0.050	<u>ZR-75-1</u>	Breast carcinoma	Breast	Carcinoma
0.062	0.023	<u>Leukemia cells</u>	Leukemia	Blood	Leukemia
0.051	0.014	<u>UCLA P-3</u>	Lung carcinoma cell line	Lung	Carcinoma
0.035	0.010	<u>KKLS</u>	Gastric adenocarcinoma	Stomach	Adenocarcinoma
0.070	0.049	<u>FaDu</u>	Hypopharyngeal squamous carcinoma	Upper aerodigestive tract	Carcinoma
0.021	0.004	<u>OVXF1023</u>	Ovarian adenocarcinoma	Ovarium	Adenocarcinoma
0.021	0.004	<u>OVXF1353</u>	Ovarian adenocarcinoma	Ovarium	Adenocarcinoma
0.021	0.004	<u>RXF 423</u>	Renal carcinoma	Kidney	Carcinoma
0.017	0.004	<u>SW-60</u>	Colorectal carcinoma	Colon	Carcinoma
0.019	0.011	<u>NCI-H46</u>	Lung carcinoma	Lung	Carcinoma
0.177	0.170	<u>SF-295</u>	Glioblastoma	Brain	Glioblastoma
0.024	0.022	<u>GLC4</u>			

Non-tumor cell line prediction result

$P_a > P_i$

P_a	P_i	Cell-line	Cell-line full name	Tissue
0.309	0.053	<u>WI-38 VA13</u>	Embryonic lung fibroblast	Lung
0.212	0.010	<u>PBMC</u>	Peripheral blood mononuclear cell	Blood
0.173	0.027	<u>IMR-90</u>	Embryonic lung fibroblast	Lung
0.143	0.078	<u>PrEC</u>	Prostate epithelial cell	Prostate
0.036	0.019	<u>TERT-RPE1</u>	Retinal pigmented epithelial cell	Retina

Complex 5

Cancer cell line prediction result

$P_a > 0.5$

P_a	P_i	Cell-line	Cell-line full name	Tissue	Tumor type
0.601	0.020	<u>NCI-H838</u>	Non-small cell lung cancer. 3 stage	Lung	Carcinoma
0.572	0.033	<u>Hs 683</u>	Oligodendroglioma	Brain	Glioma
0.536	0.044	<u>MCF7</u>	Breast carcinoma	Breast	Carcinoma
0.507	0.060	<u>A549</u>	Lung carcinoma	Lung	Carcinoma

$P_a > P_i$

Pa	Pi	Cell-line	Cell-line full name	Tissue	Tumor type
0.601	0.020	<u>NCI-H838</u>	Non-small cell lung cancer. 3 stage	Lung	Carcinoma
0.572	0.033	<u>Hs 683</u>	Oligodendroglioma	Brain	Glioma
0.536	0.044	<u>MCF7</u>	Breast carcinoma	Breast	Carcinoma
0.474	0.014	<u>HOP-18</u>	Non-small cell lung carcinoma	Lung	Carcinoma
0.507	0.060	<u>A549</u>	Lung carcinoma	Lung	Carcinoma
0.469	0.023	<u>NCI-H187</u>	Small cell lung carcinoma	Lung	Carcinoma
0.483	0.038	<u>SK-MEL-1</u>	Metastatic melanoma	Skin	Melanoma
0.466	0.057	<u>DMS-114</u>	Lung carcinoma	Lung	Carcinoma
0.414	0.020	<u>NALM-6</u>	Adult B acute lymphoblastic leukemia	Haematopoietic and lymphoid tissue	Leukemia
0.430	0.038	<u>A2058</u>	Melanoma	Skin	Melanoma
0.395	0.013	<u>DLD-1</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.416	0.035	<u>CFPAC-1</u>	Pancreatic carcinoma	Pancreas	Carcinoma
0.379	0.014	<u>MKN-7</u>	Gastric carcinoma	Stomach	Carcinoma
0.363	0.023	<u>8505C</u>	Thyroid gland undifferentiated (anaplastic) carcinoma	Thyroid	Carcinoma
0.359	0.029	<u>H9</u>	T-lymphoid	Haematopoietic and lymphoid tissue	Leukemia
0.407	0.083	<u>MDA-MB-453</u>	Breast adenocarcinoma	Breast	Adenocarcinoma
0.365	0.043	<u>M19-MEL</u>	Melanoma	Skin	Melanoma
0.356	0.056	<u>PC-6</u>	Small cell lung carcinoma	Lung	Carcinoma
0.388	0.117	<u>YAPC</u>	Pancreatic carcinoma	Pancreas	Carcinoma
0.378	0.113	<u>Kasumi 1</u>	Childhood acute myeloid leukemia with maturation	Haematopoietic and lymphoid tissue	Leukemia
0.326	0.063	<u>T98G</u>	Glioblastoma	Brain	Carcinoma
0.289	0.028	<u>Raji</u>	B-lymphoblastic cells	Haematopoietic and lymphoid tissue	Leukemia
0.273	0.037	<u>A2780</u>	Ovarian carcinoma	Ovary	Carcinoma
0.278	0.043	<u>PANC-1</u>	Pancreatic carcinoma	Pancreas	Carcinoma
0.305	0.073	<u>SN12C</u>	Renal carcinoma	Kidney	Carcinoma
0.257	0.025	<u>BGC-823</u>	Stomach adenocarcinoma	Stomach	Adenocarcinoma
0.248	0.020	<u>ADR5000</u>	Childhood T acute lymphoblastic leukemia	Blood	Leukemia
0.286	0.064	<u>CWR22R</u>	Prostate carcinoma epithelial cell line	Prostate	Carcinoma
0.316	0.097	<u>SJSA-1</u>	Osteosarcoma	Bone	Sarcoma
0.202	0.009	<u>COLO 320</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.208	0.023	<u>SMMC-7721</u>	Hepatocellular carcinoma	Liver	Carcinoma
0.262	0.078	<u>LS174T</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.307	0.129	<u>U-266</u>	Plasma cell myeloma	Blood	Myeloma
0.176	0.003	<u>MEXF276L</u>	Xenograft melanoma	Skin	Melanoma
0.176	0.003	<u>MEXF989</u>	Xenograft melanoma	Skin	Melanoma
0.176	0.003	<u>PAXF546</u>	Pancreatic carcinoma	Pancreas	Carcinoma
0.197	0.025	<u>SHP77</u>	Small cell lung carcinoma	Lung	Carcinoma
0.218	0.056	<u>St-4</u>	Stomach carcinoma	Stomach	Carcinoma
0.271	0.110	<u>HuP-T3</u>	Pancreatic adenocarcinoma	Pancreas	Adenocarcinoma
0.183	0.028	<u>LNCaP</u>	Prostate carcinoma	Prostate	Carcinoma
0.231	0.087	<u>UACC-62</u>	Melanoma	Skin	Melanoma
0.275	0.133	<u>OVCAR-5</u>	Ovarian adenocarcinoma	Ovary	Adenocarcinoma

0.208	0.080	<u>Bel-7402</u>	Hepatoma	Liver	Hepatoma
0.292	0.169	<u>RKO</u>	Colon carcinoma	Colon	Carcinoma
0.147	0.031	<u>RXF 944</u>	Renal carcinoma	Kidney	Carcinoma
0.271	0.162	<u>OVCAR-4</u>	Ovarian adenocarcinoma	Ovary	Adenocarcinoma
0.154	0.048	<u>U-937</u>	Histiocytic lymphoma	Haematopoietic and lymphoid tissue	Lymphoma
0.170	0.065	<u>MAXF401</u>	Breast carcinoma	Breast	Carcinoma
0.215	0.114	<u>HOP-62</u>	Non-small cell lung carcinoma	Lung	Carcinoma
0.144	0.046	<u>SK-BR-3</u>	Breast adenocarcinoma	Breast	Adenocarcinoma
0.175	0.078	<u>SW1573</u>	Lung carcinoma	Lung	Carcinoma
0.116	0.021	<u>1A9</u>	Ovarian adenocarcinoma	Ovary	Adenocarcinoma
0.107	0.014	<u>FaDu</u>	Hypopharyngeal squamous carcinoma	Upper aerodigestive tract	Carcinoma
0.252	0.160	<u>HOS</u>	Osteosarcoma	Bone	Sarcoma
0.235	0.144	<u>KARPAS-299</u>	Anaplastic large cell lymphoma	Haematopoietic and lymphoid tissue	Leukemia
0.238	0.154	<u>Hs-578T</u>	Invasive ductal breast carcinoma	Breast	Carcinoma
0.085	0.004	<u>UCLA P-3</u>	Lung carcinoma cell line	Lung	Carcinoma
0.107	0.029	<u>Bcap37</u>	Breast adenocarcinoma	Breast	Adenocarcinoma
0.232	0.157	<u>UO-31</u>	Renal carcinoma	Kidney	Carcinoma
0.186	0.112	<u>SF-539</u>	Glioblastoma	Brain	Glioblastoma
0.141	0.068	<u>U-937/GTB</u>	Histiocytic lymphoma	Blood	Lymphoma
0.098	0.026	<u>SK-MEL</u>	Melanoma	Skin	Melanoma
0.221	0.154	<u>PC-3</u>	Prostate carcinoma	Prostate	Carcinoma
0.098	0.032	<u>Lu1</u>	Lung carcinoma	Lung	Carcinoma
0.201	0.135	<u>HeLa</u>	Cervical adenocarcinoma	Cervix	Adenocarcinoma
0.216	0.157	<u>SK-MEL-28</u>	Melanoma	Skin	Melanoma
0.102	0.046	<u>ASPC1</u>	Pancreatic ductal adenocarcinoma	Pancreas	Adenocarcinoma
0.097	0.044	<u>ZR-75-1</u>	Breast carcinoma	Breast	Carcinoma
0.069	0.016	<u>Leukemia cells</u>	Leukemia	Blood	Leukemia
0.265	0.212	<u>PA-1</u>	Ovarian carcinoma	Ovary	Carcinoma
0.113	0.061	<u>SW480</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.219	0.167	<u>SF-268</u>	Glioblastoma	Brain	Glioblastoma
0.206	0.155	<u>MDA-MB-361</u>	Breast adenocarcinoma	Breast	Adenocarcinoma
0.072	0.022	<u>SK-VLB</u>	Ovarian carcinoma	Ovary	Carcinoma
0.071	0.022	<u>L2987</u>	Lung adenocarcinoma	Lung	Adenocarcinoma
0.052	0.005	<u>H322</u>	Lung carcinoma	Lung	Carcinoma
0.255	0.210	<u>SK-MES-1</u>	Squamous cell lung carcinoma	Lung	Carcinoma
0.048	0.007	<u>GLC4</u>			
0.131	0.092	<u>Caov-3</u>	High grade ovarian serous adenocarcinoma	Ovary	Adenocarcinoma
0.061	0.026	<u>UMUC3</u>	Bladder Carcinoma	Urinary tract	Carcinoma
0.177	0.144	<u>HT-1080</u>	Fibrosarcoma	Soft tissue	Sarcoma
0.073	0.041	<u>MCF7S</u>	Breast carcinoma	Breast	Carcinoma
0.026	0.003	<u>SW-60</u>	Colorectal carcinoma	Colon	Carcinoma
0.211	0.187	<u>NCI-H226</u>	Non-small cell lung carcinoma	Lung	Carcinoma
0.026	0.005	<u>NCI-H46</u>	Lung carcinoma	Lung	Carcinoma
0.032	0.011	<u>KKLS</u>	Gastric adenocarcinoma	Stomach	Adenocarcinoma

0.204	0.186	<u>OVCAR-8</u>	Ovarian adenocarcinoma	Ovary	Adenocarcinoma
0.021	0.004	<u>OVXF1023</u>	Ovarian adenocarcinoma	Ovary	Adenocarcinoma
0.021	0.004	<u>OVXF1353</u>	Ovarian adenocarcinoma	Ovary	Adenocarcinoma
0.021	0.004	<u>RXF 423</u>	Renal carcinoma	Kidney	Carcinoma
0.091	0.075	<u>SiHa</u>	Cervical squamous cell carcinoma	Cervix	Carcinoma
0.078	0.062	<u>Col2</u>	Colon carcinoma	Colon	Carcinoma
0.237	0.224	<u>UACC-257</u>	Melanoma	Skin	Melanoma
0.037	0.024	<u>1A9/ptx-10</u>	Ovarian adenocarcinoma	Ovary	Adenocarcinoma
0.122	0.111	<u>LXFL 529</u>	Non-small cell lung carcinoma	Lung	Carcinoma
0.150	0.140	<u>Caco-2</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.091	0.082	<u>HCT-8</u>	Ileocecal adenocarcinoma	Large intestine	Adenocarcinoma
0.057	0.050	<u>UMSCC22B</u>	Hypopharyngeal squamous cell carcinoma	Upper aerodigestive tract	Carcinoma
0.025	0.021	<u>SNB-7</u>	Glioblastoma	Brain	Glioblastoma
0.014	0.013	<u>ST-KM-1</u>	Gastric carcinoma	Stomach	Carcinoma
0.176	0.175	<u>HCC 2998</u>	Colon adenocarcinoma	Colon	Adenocarcinoma
0.016	0.015	<u>SW-1736</u>	Thyroid gland undifferentiated (anaplastic) carcinoma	Thyroid	Carcinoma
0.005	0.004	<u>MOVP-3</u>	Adult T acute lymphoblastic leukemia	Blood	Leukemia

Non-tumor cell line prediction result

Pa > Pi

Pa	Pi	Cell-line	Cell-line full name	Tissue
0.748	0.009	<u>WI-38 VA13</u>	Embryonic lung fibroblast	Lung
0.262	0.047	<u>BJ</u>	Foreskin fibroblast	Foreskin
0.223	0.025	<u>NHDF</u>	Fibroblast	Skin
0.180	0.018	<u>IMR-90</u>	Embryonic lung fibroblast	Lung
0.232	0.100	<u>MRC5</u>	Embryonic lung fibroblast	Lung
0.164	0.041	<u>HUVEC</u>	Umbilical vein endothelial cell	Endothelium
0.177	0.088	<u>HEL 299</u>	Fibroblast	Lung
0.140	0.085	<u>PrEC</u>	Prostate epithelial cell	Prostate
0.050	0.009	<u>RPTEC</u>	Renal proximal tubule epithelial cells	Kidney
0.086	0.046	<u>HaCaT</u>	Keratinocyte	Skin
0.073	0.044	<u>WIL2-NS</u>	Lymphoblastoid cell	Haematopoietic, lymphoid tissue
0.039	0.014	<u>TERT-RPE1</u>	Retinal pigmented epithelial cell	Retina
0.029	0.009	<u>HASMC</u>	Aortic smooth muscle	Muscle

Table S13. Sites of metabolism prediction (SOMP) for complexes **1–5** by GUSAR.**Complex 1**Meta-Pred Web Server prediction results of site of metabolism for enzyme **UGT**

Atom Number	Rank	DeltaP
20	1	0,126
21	1	0,126
3	2	-0,818
17	2	-0,818
4	3	-0,761
5	3	-0,761
18	3	-0,761
19	3	-0,761
1	4	-0,680
2	4	-0,680
15	4	-0,680
16	4	-0,680
22	4	-0,680
24	4	-0,680
26	4	-0,680
28	4	-0,680
6	5	-0,574
14	5	-0,574
23	6	-0,461
25	6	-0,461
27	6	-0,461
29	6	-0,461
7	7	-0,341
13	7	-0,341
10	8	-0,071
9	9	-0,067
11	9	-0,067
8	10	-0,049
12	10	-0,049

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP3A4**

Atom Number	Rank	DeltaP
22	1	0,917
24	1	0,917
26	1	0,917
28	1	0,917
7	2	0,287
13	2	0,287
3	3	0,172
17	3	0,172
4	4	0,155
18	4	0,155
10	5	0,083
1	6	0,027
15	6	0,027
23	7	0,013
25	7	0,013
27	7	0,013
29	7	0,013
20	8	-0,536
21	8	-0,536
2	9	-0,447
16	9	-0,447
9	10	-0,336
11	10	-0,336
6	11	-0,239
14	11	-0,239
5	12	-0,161
19	12	-0,161
8	13	-0,128
12	13	-0,128

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2D6**

Atom Number	Rank	DeltaP
22	1	0,732
24	1	0,732
26	1	0,732
28	1	0,732
7	2	0,154
13	2	0,154
10	3	0,019
3	4	0,013
17	4	0,013
20	5	-0,609
21	5	-0,609
6	6	-0,443
14	6	-0,443
5	7	-0,417
9	7	-0,417
11	7	-0,417
19	7	-0,417
2	8	-0,407
16	8	-0,407
23	9	-0,252
25	9	-0,252
27	9	-0,252
29	9	-0,252
8	10	-0,218
12	10	-0,218
1	11	-0,190
15	11	-0,190
4	12	-0,141
18	12	-0,141

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2C9**

Atom Number	Rank	DeltaP
22	1	0,748
24	1	0,748
26	1	0,748
28	1	0,748
20	2	0,604
21	2	0,604
7	3	0,233
13	3	0,233
10	4	0,184
23	5	0,050
25	5	0,050
27	5	0,050
29	5	0,050
6	6	-0,431
14	6	-0,431
2	7	-0,361
16	7	-0,361
5	8	-0,294
19	8	-0,294
9	9	-0,252
11	9	-0,252
1	10	-0,119
15	10	-0,119
4	11	-0,107
18	11	-0,107
3	12	-0,032
17	12	-0,032
8	13	-0,028
12	13	-0,028

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2C19**

Atom Number	Rank	DeltaP
22	1	0,737
24	1	0,737
26	1	0,737
28	1	0,737
7	2	0,325
13	2	0,325
10	3	0,186
3	4	0,091
17	4	0,091
23	5	0,040
25	5	0,040
27	5	0,040
29	5	0,040
20	6	-0,425
21	6	-0,425
6	7	-0,328
14	7	-0,328
2	8	-0,284
16	8	-0,284
9	9	-0,235
11	9	-0,235
5	10	-0,123
19	10	-0,123
4	11	-0,036
18	11	-0,036
8	12	-0,029
12	12	-0,029
1	13	-0,008
15	13	-0,008

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP1A2**

Atom Number	Rank	DeltaP
22	1	0,715
24	1	0,715
26	1	0,715
28	1	0,715
7	2	0,210
13	2	0,210
4	3	0,135
18	3	0,135
3	4	0,059
10	4	0,059
17	4	0,059
20	5	-0,453
21	5	-0,453
2	6	-0,332
16	6	-0,332
9	7	-0,252
11	7	-0,252
6	8	-0,197
14	8	-0,197
23	9	-0,153
25	9	-0,153
27	9	-0,153
29	9	-0,153
5	10	-0,137
19	10	-0,137
8	11	-0,102
12	11	-0,102
1	12	-0,089
15	12	-0,089

Complex 2

Meta-Pred Web Server prediction results of site of metabolism for enzyme UGT

Atom Number	Rank	DeltaP
7	1	0,059
14	1	0,059
4	2	-0,757
5	2	-0,757
19	2	-0,757
20	2	-0,757
1	3	-0,640
2	3	-0,640
3	3	-0,640
16	3	-0,640
17	3	-0,640
18	3	-0,640
6	4	-0,330
8	4	-0,330
10	4	-0,330
15	4	-0,330
21	4	-0,330
22	4	-0,330
9	5	-0,138
23	5	-0,138
11	6	-0,022
13	6	-0,022
12	7	-0,021

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP3A4**

Atom Number	Rank	DeltaP
8	1	0,069
21	1	0,069
10	2	-0,986
22	2	-0,986
3	3	-0,972
18	3	-0,972
6	4	-0,937
15	4	-0,937
1	5	-0,930
16	5	-0,930
9	6	-0,919
23	6	-0,919
2	7	-0,809
17	7	-0,809
4	8	-0,774
19	8	-0,774
11	9	-0,615
13	9	-0,615
5	10	-0,605
20	10	-0,605
7	11	-0,358
14	11	-0,358
12	12	-0,056

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2D6**

Atom Number	Rank	DeltaP
8	1	0,372
21	1	0,372
12	2	0,215
1	3	-0,928
16	3	-0,928
3	4	-0,927
18	4	-0,927
9	5	-0,881
10	5	-0,881
22	5	-0,881
23	5	-0,881
6	6	-0,853
15	6	-0,853
2	7	-0,638
17	7	-0,638
5	8	-0,528
20	8	-0,528
4	9	-0,491
19	9	-0,491
7	10	-0,326
11	10	-0,326
13	10	-0,326
14	10	-0,326

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2C9**

Atom Number	Rank	DeltaP
8	1	0,319
21	1	0,319
12	2	0,141
1	3	-0,950
16	3	-0,950
3	4	-0,948
18	4	-0,948
6	5	-0,888
15	5	-0,888
9	6	-0,737
10	6	-0,737
22	6	-0,737
23	6	-0,737
4	7	-0,722
19	7	-0,722
2	8	-0,705
17	8	-0,705
5	9	-0,544
20	9	-0,544
11	10	-0,494
13	10	-0,494
7	11	-0,172
14	11	-0,172

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2C19**

Atom Number	Rank	DeltaP
8	1	0,458
21	1	0,458
12	2	0,227
10	3	-0,899
22	3	-0,899
3	4	-0,874
18	4	-0,874
1	5	-0,843
16	5	-0,843
9	6	-0,788
23	6	-0,788
6	7	-0,777
15	7	-0,777
2	8	-0,565
17	8	-0,565
4	9	-0,564
19	9	-0,564
11	10	-0,339
13	10	-0,339
5	11	-0,210
20	11	-0,210
7	12	-0,060
14	12	-0,060

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP1A2**

Atom Number	Rank	DeltaP
8	1	0,299
21	1	0,299
12	2	0,042
10	3	-0,908
22	3	-0,908
3	4	-0,820
18	4	-0,820
1	5	-0,809
16	5	-0,809
9	6	-0,796
23	6	-0,796
6	7	-0,746
15	7	-0,746
2	8	-0,410
17	8	-0,410
11	9	-0,399
13	9	-0,399
4	10	-0,382
19	10	-0,382
5	11	-0,336
20	11	-0,336
7	12	-0,193
14	12	-0,193

Complex 3

Meta-Pred Web Server prediction results of site of metabolism for enzyme UGT

Atom Number	Rank	DeltaP
8	1	0,073
12	1	0,073
4	2	-0,736
18	2	-0,736
1	3	-0,626
2	3	-0,626
3	3	-0,626
5	3	-0,626
15	3	-0,626
16	3	-0,626
17	3	-0,626
19	3	-0,626
6	4	-0,345
14	4	-0,345
20	5	-0,261
21	5	-0,261
7	6	-0,227
13	6	-0,227
22	7	-0,127
23	7	-0,127
9	8	-0,010
11	8	-0,010
10	9	-0,006

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP3A4**

Atom Number	Rank	DeltaP
2	1	0,588
16	1	0,588
4	2	0,334
18	2	0,334
7	3	0,267
13	3	0,267
10	4	0,233
6	5	0,012
14	5	0,012
20	6	-0,953
21	6	-0,953
3	7	-0,920
17	7	-0,920
22	8	-0,776
23	8	-0,776
1	9	-0,684
15	9	-0,684
9	10	-0,327
11	10	-0,327
5	11	-0,214
19	11	-0,214
8	12	-0,047
12	12	-0,047

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2D6**

Atom Number	Rank	DeltaP
2	1	0,544
16	1	0,544
4	2	0,326
18	2	0,326
7	3	0,146
13	3	0,146
10	4	0,139
6	5	0,025
14	5	0,025
20	6	-0,965
21	6	-0,965
3	7	-0,948
17	7	-0,948
22	8	-0,808
23	8	-0,808
1	9	-0,782
15	9	-0,782
5	10	-0,445
19	10	-0,445
9	11	-0,412
11	11	-0,412
8	12	-0,157
12	12	-0,157

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2C9**

Atom Number	Rank	DeltaP
10	1	0,136
7	2	0,123
13	2	0,123
20	3	-0,940
21	3	-0,940
3	4	-0,888
17	4	-0,888
1	5	-0,736
15	5	-0,736
22	6	-0,689
23	6	-0,689
6	7	-0,679
14	7	-0,679
5	8	-0,609
19	8	-0,609
9	9	-0,459
11	9	-0,459
4	10	-0,281
18	10	-0,281
8	11	-0,155
12	11	-0,155
2	12	-0,021
16	12	-0,021

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2C19**

Atom Number	Rank	DeltaP
7	1	0,335
13	1	0,335
10	2	0,271
8	3	0,043
12	3	0,043
20	4	-0,915
21	4	-0,915
3	5	-0,896
17	5	-0,896
22	6	-0,686
23	6	-0,686
1	7	-0,680
15	7	-0,680
6	8	-0,550
14	8	-0,550
9	9	-0,225
11	9	-0,225
4	10	-0,215
18	10	-0,215
2	11	-0,201
16	11	-0,201
5	12	-0,198
19	12	-0,198

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP1A2**

Atom Number	Rank	DeltaP
2	1	0,710
16	1	0,710
4	2	0,388
18	2	0,388
7	3	0,126
13	3	0,126
10	4	0,082
20	5	-0,930
21	5	-0,930
3	6	-0,861
17	6	-0,861
22	7	-0,713
23	7	-0,713
1	8	-0,575
15	8	-0,575
9	9	-0,332
11	9	-0,332
5	10	-0,287
19	10	-0,287
8	11	-0,140
12	11	-0,140
6	12	-0,002
14	12	-0,002

Complex 4

Meta-Pred Web Server prediction results of site of metabolism for enzyme UGT

Atom Number	Rank	DeltaP
2	1	-0,914
16	1	-0,914
1	2	-0,818
3	2	-0,818
4	2	-0,818
5	2	-0,818
15	2	-0,818
17	2	-0,818
18	2	-0,818
19	2	-0,818
6	3	-0,637
14	3	-0,637
20	4	-0,503
21	4	-0,503
7	5	-0,355
13	5	-0,355
10	6	-0,045
9	7	-0,043
11	7	-0,043
8	8	-0,024
12	8	-0,024

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP3A4**

Atom Number	Rank	DeltaP
7	1	0,182
13	1	0,182
10	2	0,107
1	3	0,102
15	3	0,102
2	4	0,054
16	4	0,054
20	5	-0,961
21	5	-0,961
3	6	-0,918
17	6	-0,918
6	7	-0,573
14	7	-0,573
8	8	-0,422
9	8	-0,422
11	8	-0,422
12	8	-0,422
5	9	-0,374
19	9	-0,374
4	10	-0,033
18	10	-0,033

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2D6**

Atom Number	Rank	DeltaP
2	1	0,425
16	1	0,425
7	2	0,145
13	2	0,145
10	3	0,139
20	4	-0,952
21	4	-0,952
3	5	-0,844
17	5	-0,844
6	6	-0,697
14	6	-0,697
5	7	-0,595
19	7	-0,595
8	8	-0,377
9	8	-0,377
11	8	-0,377
12	8	-0,377
4	9	-0,280
18	9	-0,280
1	10	-0,003
15	10	-0,003

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2C9**

Atom Number	Rank	DeltaP
1	1	0,160
15	1	0,160
10	2	0,132
7	3	0,120
13	3	0,120
20	4	-0,918
21	4	-0,918
3	5	-0,909
17	5	-0,909
6	6	-0,819
14	6	-0,819
5	7	-0,691
19	7	-0,691
4	8	-0,530
18	8	-0,530
8	9	-0,426
9	9	-0,426
11	9	-0,426
12	9	-0,426
2	10	-0,017
16	10	-0,017

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2C19**

Atom Number	Rank	DeltaP
7	1	0,277
13	1	0,277
1	2	0,230
15	2	0,230
10	3	0,194
2	4	0,183
16	4	0,183
20	5	-0,925
21	5	-0,925
3	6	-0,835
17	6	-0,835
6	7	-0,710
14	7	-0,710
5	8	-0,387
19	8	-0,387
8	9	-0,310
9	9	-0,310
11	9	-0,310
12	9	-0,310
4	10	-0,056
18	10	-0,056

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP1A2**

Atom Number	Rank	DeltaP
2	1	0,055
16	1	0,055
20	2	-0,959
21	2	-0,959
3	3	-0,898
17	3	-0,898
6	4	-0,676
14	4	-0,676
5	5	-0,496
19	5	-0,496
8	6	-0,479
9	6	-0,479
11	6	-0,479
12	6	-0,479
4	7	-0,200
18	7	-0,200
10	8	-0,095
1	9	-0,010
15	9	-0,010
7	10	-0,003
13	10	-0,003

Complex 5

Meta-Pred Web Server prediction results of site of metabolism for enzyme UGT

Atom Number	Rank	DeltaP
3	1	-0,838
17	1	-0,838
2	2	-0,783
16	2	-0,783
4	3	-0,708
5	3	-0,708
18	3	-0,708
19	3	-0,708
1	4	-0,603
15	4	-0,603
6	5	-0,487
14	5	-0,487
22	5	-0,487
23	5	-0,487
7	6	-0,250
13	6	-0,250
10	7	-0,040
9	8	-0,039
11	8	-0,039
20	9	-0,022
21	9	-0,022
8	10	-0,021
12	10	-0,021

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP3A4**

Atom Number	Rank	DeltaP
22	1	0,802
23	1	0,802
7	2	0,252
13	2	0,252
4	3	0,165
18	3	0,165
3	4	0,138
17	4	0,138
1	5	0,012
15	5	0,012
20	6	-0,991
21	6	-0,991
2	7	-0,807
16	7	-0,807
5	8	-0,517
19	8	-0,517
8	9	-0,471
9	9	-0,471
11	9	-0,471
12	9	-0,471
6	10	-0,392
14	10	-0,392
10	11	-0,006

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2D6**

Atom Number	Rank	DeltaP
22	1	0,916
23	1	0,916
7	2	0,035
13	2	0,035
20	3	-0,991
21	3	-0,991
2	4	-0,845
16	4	-0,845
5	5	-0,691
19	5	-0,691
6	6	-0,677
14	6	-0,677
8	7	-0,605
9	7	-0,605
11	7	-0,605
12	7	-0,605
4	8	-0,194
18	8	-0,194
1	9	-0,192
15	9	-0,192
10	10	-0,187
3	11	-0,072
17	11	-0,072

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2C9**

Atom Number	Rank	DeltaP
22	1	0,844
23	1	0,844
7	2	0,038
13	2	0,038
20	3	-0,991
21	3	-0,991
2	4	-0,927
16	4	-0,927
5	5	-0,779
19	5	-0,779
6	6	-0,759
14	6	-0,759
9	7	-0,588
11	7	-0,588
8	8	-0,355
12	8	-0,355
4	9	-0,292
18	9	-0,292
1	10	-0,155
15	10	-0,155
3	11	-0,113
17	11	-0,113
10	12	-0,094

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP2C19**

Atom Number	Rank	DeltaP
22	1	0,877
23	1	0,877
7	2	0,262
13	2	0,262
3	3	0,223
17	3	0,223
1	4	0,211
15	4	0,211
10	5	0,035
20	6	-0,989
21	6	-0,989
2	7	-0,822
16	7	-0,822
6	8	-0,546
14	8	-0,546
5	9	-0,479
19	9	-0,479
8	10	-0,419
9	10	-0,419
11	10	-0,419
12	10	-0,419
4	11	-0,135
18	11	-0,135

Meta-Pred Web Server prediction results of site of metabolism for enzyme **CYP1A2**

Atom Number	Rank	DeltaP
22	1	0,810
23	1	0,810
3	2	0,062
17	2	0,062
7	3	0,057
13	3	0,057
4	4	0,025
18	4	0,025
20	5	-0,991
21	5	-0,991
2	6	-0,814
16	6	-0,814
5	7	-0,604
19	7	-0,604
8	8	-0,525
9	8	-0,525
11	8	-0,525
12	8	-0,525
6	9	-0,461
14	9	-0,461
10	10	-0,184
1	11	-0,021
15	11	-0,021

Table S14. Prediction of activity spectra for complexes **1–5**, for $P_a > 0.7$ and $P_a > 0.0$.

COMPLEX 1

☐ All
 ☐ $P_a > P_i$
☐ $P_a > 0,3$
☒ $P_a > 0,7$

P_a	P_i	Activity
0,892	0,007	Phobic disorders treatment
0,730	0,022	Acylcarnitine hydrolase inhibitor
0,707	0,007	Cardiovascular analeptic
0,703	0,013	27-Hydroxycholesterol 7 α -monooxygenase inhibitor
0,722	0,053	CYP2C12 substrate
0,702	0,054	Testosterone 17 β -dehydrogenase (NADP+) inhibitor

COMPLEX 2

☐ All
 ☐ $P_a > P_i$
☐ $P_a > 0,3$
☒ $P_a > 0,7$

P_a	P_i	Activity
0,787	0,003	Vascular endothelial growth factor 3 antagonist
0,793	0,036	Phobic disorders treatment
0,778	0,031	Testosterone 17 β -dehydrogenase (NADP+) inhibitor
0,762	0,018	Nicotinic $\alpha_6\beta_3\beta_4\alpha_5$ receptor antagonist
0,758	0,017	Antineoplastic
0,760	0,029	Acrocyllindropepsin inhibitor
0,760	0,029	Saccharopepsin inhibitor
0,760	0,029	Chymosin inhibitor
0,720	0,008	Glucan 1,4- α -maltotriohydrolase inhibitor
0,706	0,003	Tyrosine-protein kinase receptor FLT3 inhibitor
0,721	0,019	5-O-(4-coumaroyl)-D-quinic 3'-monooxygenase inhibitor
0,746	0,049	Aspulvinone dimethylallyltransferase inhibitor
0,711	0,024	Nicotinic $\alpha_2\beta_2$ receptor antagonist

COMPLEX 3

☐ All
 ☐ $P_a > P_i$
☐ $P_a > 0,3$
☒ $P_a > 0,7$

P_a	P_i	Activity
0,850	0,001	Prostaglandin E1 antagonist

0,836	0,004	Ophthalmic drug
0,824	0,003	Antiglaucomic
0,831	0,023	Phobic disorders treatment
0,799	0,011	Nicotinic alpha6beta3beta4alpha5 receptor antagonist
0,767	0,002	Gestagen antagonist
0,760	0,013	5-O-(4-coumaroyl)-D-quinic 3'-monooxygenase inhibitor
0,778	0,031	Testosterone 17beta-dehydrogenase (NADP+) inhibitor
0,760	0,016	Nicotinic alpha2beta2 receptor antagonist
0,760	0,029	Acrocyllindropepsin inhibitor
0,760	0,029	Saccharopepsin inhibitor
0,760	0,029	Chymosin inhibitor
0,720	0,008	Glucan 1,4-alpha-maltotriohydrolase inhibitor
0,702	0,050	CYP2J substrate

COMPLEX 4

☐ All
 ☐ Pa>Pi
 ☐ Pa>0,3
 ☒ Pa>0,7

Pa	Pi	Activity
0,799	0,034	Phobic disorders treatment
0,731	0,003	Antineoplastic (non-Hodgkin's lymphoma)
0,733	0,008	Phosphatase inhibitor
0,752	0,038	Testosterone 17beta-dehydrogenase (NADP+) inhibitor
0,733	0,025	Nicotinic alpha6beta3beta4alpha5 receptor antagonist
0,731	0,036	Chymosin inhibitor
0,731	0,036	Acrocyllindropepsin inhibitor
0,731	0,036	Saccharopepsin inhibitor

COMPLEX 5

☐ All
 ☐ Pa>Pi
 ☐ Pa>0,3
 ☒ Pa>0,7

Pa	Pi	Activity
0,847	0,018	Phobic disorders treatment
0,829	0,009	Antineoplastic
0,832	0,018	Testosterone 17beta-dehydrogenase (NADP+) inhibitor
0,816	0,032	CYP2C12 substrate
0,786	0,015	Acylcarnitine hydrolase inhibitor
0,790	0,023	Saccharopepsin inhibitor
0,790	0,023	Chymosin inhibitor
0,790	0,023	Acrocylindropepsin inhibitor
0,774	0,024	Antiseborrheic
0,754	0,014	Alkylacetylgllycerophosphatase inhibitor
0,757	0,024	Alkenylglycerophosphocholine hydrolase inhibitor
0,745	0,013	JAK2 expression inhibitor
0,733	0,003	Antineoplastic (non-Hodgkin's lymphoma)
0,746	0,018	Beta-adrenergic receptor kinase inhibitor
0,746	0,018	G-protein-coupled receptor kinase inhibitor
0,753	0,030	Antieczematic
0,727	0,004	Imidazoline receptor agonist
0,764	0,044	Aspulvinone dimethylallyltransferase inhibitor
0,730	0,018	Lysase inhibitor
0,717	0,008	Glucan 1,4-alpha-maltotriohydrolase inhibitor
0,744	0,036	CYP2J substrate
0,702	0,013	27-Hydroxycholesterol 7alpha-monooxygenase inhibitor
0,729	0,058	Ubiquinol-cytochrome-c reductase inhibitor

0,703	0,032	CYP2J2 substrate
0,701	0,034	Nicotinic alpha6beta3beta4alpha5 receptor antagonist

Complex 1 All

☒ All
 ☐ Pa>Pi
 ☐ Pa>0,3
 ☐ Pa>0,7

Pa	Pi	Activity
0,892	0,007	Phobic disorders treatment
0,730	0,022	Acylcarnitine hydrolase inhibitor
0,707	0,007	Cardiovascular analeptic
0,703	0,013	27-Hydroxycholesterol 7alpha-monooxygenase inhibitor
0,692	0,004	Peptidoglycan glycosyltransferase inhibitor
0,722	0,053	CYP2C12 substrate
0,671	0,006	Sigma receptor agonist
0,686	0,022	Alkylacetylgllycerophosphatase inhibitor
0,664	0,006	Antineoplastic (non-Hodgkin's lymphoma)
0,702	0,054	Testosterone 17beta-dehydrogenase (NADP+) inhibitor
0,666	0,050	Antineurotic
0,623	0,008	Dolichyl-diphosphooligosaccharide-protein glycotransferase inhibitor
0,687	0,073	Ubiquinol-cytochrome-c reductase inhibitor
0,667	0,054	Chymosin inhibitor
0,667	0,054	Acrocyllindropepsin inhibitor
0,667	0,054	Saccharopepsin inhibitor
0,607	0,004	Sigma 1 receptor agonist
0,651	0,050	Nicotinic alpha6beta3beta4alpha5 receptor antagonist
0,602	0,006	Imidazoline receptor agonist
0,633	0,038	5-O-(4-coumaroyl)-D-quinic acid 3'-monooxygenase inhibitor
0,618	0,034	Antidyskinetic
0,607	0,033	Glucan endo-1,6-beta-glucosidase inhibitor
0,638	0,073	CYP2J substrate
0,574	0,021	Glucan 1,4-alpha-maltotriohydrolase inhibitor
0,588	0,044	Ribulose-phosphate 3-epimerase inhibitor
0,581	0,037	UDP-N-acetylglucosamine 4-epimerase inhibitor
0,612	0,081	Membrane permeability inhibitor
0,544	0,016	Apyrase inhibitor

0,536	0,019	Cyclic AMP agonist
0,544	0,028	Trimethylamine-oxide aldolase inhibitor
0,584	0,068	CYP2J2 substrate
0,556	0,042	Acetylcholine neuromuscular blocking agent
0,552	0,039	Glucan endo-1,3-beta-D-glucosidase inhibitor
0,552	0,043	Platelet aggregation stimulant
0,544	0,036	Ovulation inhibitor
0,571	0,063	Phosphatase inhibitor
0,548	0,050	CYP3A2 substrate
0,556	0,059	Nicotinic alpha2beta2 receptor antagonist
0,597	0,101	Mucomembranous protector
0,532	0,042	Platelet adhesion inhibitor
0,493	0,020	H ⁺ -exporting ATPase inhibitor
0,525	0,060	Protein-disulfide reductase (glutathione) inhibitor
0,550	0,088	Polyporopepsin inhibitor
0,481	0,021	2-Haloacid dehalogenase inhibitor
0,531	0,074	Sugar-phosphatase inhibitor
0,505	0,051	5 Hydroxytryptamine release stimulant
0,482	0,029	Na ⁺ -transporting two-sector ATPase inhibitor
0,528	0,077	Fusarinine-C ornithinesterase inhibitor
0,467	0,017	Antiparkinsonian
0,518	0,069	Antiseborrheic
0,494	0,053	Antiviral (Picornavirus)
0,472	0,036	CYP2A4 substrate
0,462	0,026	Nitrite reductase (NO-forming) inhibitor
0,465	0,031	CYP2A2 substrate
0,518	0,084	Glutamyl endopeptidase II inhibitor
0,493	0,061	Carboxypeptidase Taq inhibitor
0,484	0,054	CYP3A1 substrate
0,455	0,028	CYP2D2 inhibitor
0,468	0,042	Phenol O-methyltransferase inhibitor
0,475	0,052	Antinociceptive
0,455	0,040	Antisecretoric
0,470	0,057	1,4-Lactonase inhibitor
0,484	0,071	Macrophage colony stimulating factor agonist
0,476	0,063	Venombin AB inhibitor
0,464	0,053	Membrane integrity antagonist

0,415	0,006	Cycloartenol synthase inhibitor
0,439	0,032	Antimyopathies
0,426	0,024	Hematopoietic inhibitor
0,494	0,094	Pseudolysin inhibitor
0,451	0,051	Respiratory analeptic
0,513	0,114	CYP2H substrate
0,460	0,063	Lysine 2,3-aminomutase inhibitor
0,431	0,036	Dementia treatment
0,464	0,069	Limulus clotting factor B inhibitor
0,439	0,044	CYP2D15 substrate
0,448	0,054	Exoribonuclease II inhibitor
0,436	0,043	Acetylgalactosaminyl-O-glycosyl-glycoprotein beta-1,3-N-acetylglucosaminyltransferase inhibitor
0,480	0,087	Omptin inhibitor
0,413	0,020	Chaperonin ATPase inhibitor
0,448	0,056	Ecdysone 20-monooxygenase inhibitor
0,396	0,007	Histamine H1 receptor agonist
0,430	0,043	Membrane permeability enhancer
0,462	0,076	Lysase inhibitor
0,411	0,027	DELTA14-sterol reductase inhibitor
0,385	0,005	Antineoplastic, alkylator
0,436	0,057	CYP2D16 substrate
0,439	0,061	Fragilysin inhibitor
0,416	0,040	Peptide-N4-(N-acetyl-beta-glucosaminyl)asparagine amidase inhibitor
0,393	0,019	Imidazoline I1 receptor agonist
0,427	0,054	Formaldehyde transketolase inhibitor
0,440	0,068	Neurotransmitter antagonist
0,438	0,067	Fibrinogen receptor antagonist
0,441	0,074	Alkenylglycerophosphocholine hydrolase inhibitor
0,452	0,087	Electron-transferring-flavoprotein dehydrogenase inhibitor
0,401	0,036	Albendazole monooxygenase inhibitor
0,427	0,064	Beta-adrenergic receptor kinase inhibitor
0,427	0,064	G-protein-coupled receptor kinase inhibitor
0,425	0,064	4-Nitrophenol 2-monooxygenase inhibitor
0,395	0,035	Long-chain-aldehyde dehydrogenase inhibitor
0,412	0,053	Analeptic
0,407	0,048	All-trans-retinyl-palmitate hydrolase inhibitor
0,385	0,027	Opioid kappa 3 receptor antagonist

0,438	0,081	Alopecia treatment
0,405	0,050	Acetylesterase inhibitor
0,421	0,069	Dimethylargininase inhibitor
0,375	0,022	Galactolipase inhibitor
0,373	0,022	Flavin-containing monooxygenase inhibitor
0,423	0,073	Spasmolytic, urinary
0,357	0,008	Antineoplastic (liver cancer)
0,407	0,060	Gluconate 5-dehydrogenase inhibitor
0,399	0,053	Mucinaminyserine mucinaminidase inhibitor
0,379	0,033	CYP2G1 substrate
0,372	0,027	Oxidizing agent
0,371	0,028	Sorbitol-6-phosphate 2-dehydrogenase inhibitor
0,396	0,057	CYP2B5 substrate
0,386	0,050	Phosphoinositide 5-phosphatase inhibitor
0,403	0,067	Polyamine-transporting ATPase inhibitor
0,370	0,035	Hydroxylamine reductase (NADH) inhibitor
0,519	0,185	Gluconate 2-dehydrogenase (acceptor) inhibitor
0,355	0,021	Adrenaline release stimulant
0,480	0,147	Aspulvinone dimethylallyltransferase inhibitor
0,371	0,039	Poly(beta-D-mannuronate) lyase inhibitor
0,358	0,029	Benzaldehyde dehydrogenase (NADP+) inhibitor
0,371	0,043	Phosphatidylinositol diacylglycerol-lyase inhibitor
0,431	0,105	Complement factor D inhibitor
0,378	0,052	Limulus clotting factor C inhibitor
0,384	0,060	Simian immunodeficiency virus proteinase inhibitor
0,383	0,059	Cyclohexanone monooxygenase inhibitor
0,356	0,033	Xylan endo-1,3-beta-xylosidase inhibitor
0,452	0,130	Kidney function stimulant
0,417	0,095	5 Hydroxytryptamine uptake stimulant
0,369	0,051	Myc inhibitor
0,365	0,048	CYP3A7 substrate
0,345	0,030	N-hydroxy-2-acetamidofluorene reductase inhibitor
0,371	0,058	CYP2C9 inducer
0,364	0,052	Pullulanase inhibitor
0,350	0,039	CYP2B11 substrate
0,401	0,093	Phosphatidylcholine-retinol O-acyltransferase inhibitor
0,347	0,039	Clavamate synthase inhibitor

0,371	0,063	Tpr proteinase (<i>Porphyromonas gingivalis</i>) inhibitor
0,412	0,105	NADPH-cytochrome-c2 reductase inhibitor
0,381	0,074	Sphinganine kinase inhibitor
0,389	0,083	CYP2A1 substrate
0,347	0,042	Antiprotozoal (<i>Amoeba</i>)
0,334	0,029	Steroid synthesis inhibitor
0,363	0,058	Leukopoiesis inhibitor
0,401	0,097	Cytoprotectant
0,387	0,084	Fibrolase inhibitor
0,324	0,025	Vascular dementia treatment
0,342	0,045	Glycolate dehydrogenase inhibitor
0,345	0,048	Dextranase inhibitor
0,316	0,020	Raynaud's phenomenon treatment
0,342	0,049	Undecaprenyldiphospho-muramoylpentapeptide beta-N-acetylglucosaminyltransferase inhibitor
0,365	0,072	Hydroxylamine oxidase inhibitor
0,366	0,074	Mannan endo-1,4-beta-mannosidase inhibitor
0,360	0,068	GABA aminotransferase inhibitor
0,322	0,032	Alpha-N-acetylglucosaminidase inhibitor
0,313	0,023	Antineoplastic (small cell lung cancer)
0,374	0,085	Neurodegenerative diseases treatment
0,321	0,032	Thiamine-triphosphatase inhibitor
0,350	0,063	Aspergillopepsin I inhibitor
0,408	0,123	Gastrin inhibitor
0,342	0,057	CYP7 inhibitor
0,344	0,060	Lysostaphin inhibitor
0,327	0,045	Taurine-2-oxoglutarate transaminase inhibitor
0,293	0,012	Gastrointestinal motility stimulant
0,373	0,092	Vasoprotector
0,320	0,040	Shikimate O-hydroxycinnamoyltransferase inhibitor
0,300	0,020	Calcium-sensing receptor agonist
0,296	0,016	Farnesoid X receptor antagonist
0,361	0,084	Gonadotropin antagonist
0,412	0,135	Membrane integrity agonist
0,314	0,037	Signal peptidase I inhibitor
0,341	0,065	Chitinase inhibitor
0,337	0,062	Enteropeptidase inhibitor
0,366	0,093	Hydrogen dehydrogenase inhibitor

0,316	0,044	Antitoxic
0,287	0,015	Alpha-pinene-oxide decyclase inhibitor
0,348	0,078	N-acetylneuraminate 7-O(or 9-O)-acetyltransferase inhibitor
0,295	0,026	2-Haloacid dehalogenase (configuration-inverting) inhibitor
0,291	0,023	ATP-binding cassette A1 stimulant
0,288	0,020	Antineoplastic (ovarian cancer)
0,350	0,083	Glycerol-3-phosphate oxidase inhibitor
0,336	0,069	ADP-thymidine kinase inhibitor
0,294	0,028	Oxytocic
0,309	0,046	Dipeptidase E inhibitor
0,346	0,085	Menopausal disorders treatment
0,309	0,048	Opioid dependency treatment
0,267	0,007	Prolactin inhibitor
0,283	0,023	Cyclamate sulfohydrolase inhibitor
0,323	0,063	D-lactaldehyde dehydrogenase inhibitor
0,283	0,024	Alkylator
0,293	0,034	N-acetyllactosaminide beta-1,3-N-acetylglucosaminyltransferase inhibitor
0,310	0,052	Antineoplastic (pancreatic cancer)
0,311	0,054	Thiosulfate dehydrogenase inhibitor
0,293	0,036	Alkylglycerophosphoethanolamine phosphodiesterase inhibitor
0,351	0,094	Fatty-acyl-CoA synthase inhibitor
0,336	0,080	Peptidyl-dipeptidase Dcp inhibitor
0,302	0,046	Hyaluronic acid agonist
0,307	0,052	Arylacetonitrilase inhibitor
0,336	0,080	Alkenylglycerophosphoethanolamine hydrolase inhibitor
0,294	0,038	Glycine dehydrogenase (decarboxylating) inhibitor
0,346	0,091	Caspase 8 stimulant
0,307	0,052	Antiparkinsonian, rigidity relieving
0,367	0,113	Erythropoiesis stimulant
0,349	0,094	Insulin promoter
0,338	0,084	Antipruritic
0,349	0,095	Rubredoxin-NAD ⁺ reductase inhibitor
0,359	0,106	Antihypoxic
0,324	0,071	Antiviral (Adenovirus)
0,400	0,146	Glycosylphosphatidylinositol phospholipase D inhibitor
0,380	0,127	Phospholipid-translocating ATPase inhibitor
0,312	0,059	Cyclomaltodextrinase inhibitor

0,351	0,098	Arginine 2-monooxygenase inhibitor
0,369	0,117	NADPH peroxidase inhibitor
0,297	0,046	MAP kinase kinase 4 inhibitor
0,329	0,079	Glyoxylate reductase inhibitor
0,330	0,080	(R)-Pantolactone dehydrogenase (flavin) inhibitor
0,314	0,065	N-acylmannosamine kinase inhibitor
0,297	0,048	2,3,4,5-Tetrahydropyridine-2,6-dicarboxylate N-succinyltransferase inhibitor
0,337	0,089	Thymidylate 5'-phosphatase inhibitor
0,315	0,068	Loop diuretic
0,369	0,121	Octopamine antagonist
0,305	0,057	Glucan 1,4-alpha-maltotetraohydrolase inhibitor
0,295	0,049	Yeast ribonuclease inhibitor
0,364	0,118	Leukopoiesis stimulant
0,305	0,062	CYP2C10 substrate
0,270	0,028	Antidepressant, Imipramin-like
0,355	0,115	Histamine release stimulant
0,363	0,122	MAP kinase stimulant
0,283	0,045	2-Hydroxy-3-oxoadipate synthase inhibitor
0,333	0,095	Feruloyl esterase inhibitor
0,305	0,067	Pyroglutamyl-peptidase II inhibitor
0,323	0,086	Sulfite dehydrogenase inhibitor
0,314	0,079	Antineoplastic (solid tumors)
0,324	0,090	Gamma-guanidinobutyraldehyde dehydrogenase inhibitor
0,362	0,128	Fructose 5-dehydrogenase inhibitor
0,317	0,085	Methylamine-glutamate N-methyltransferase inhibitor
0,269	0,041	RNA directed DNA polymerase inhibitor
0,312	0,085	Fucoesterol-epoxide lyase inhibitor
0,269	0,042	Aldosterone antagonist
0,274	0,048	Sclerosant
0,258	0,033	CYP2D1 substrate
0,375	0,150	Phthalate 4,5-dioxygenase inhibitor
0,260	0,035	Maltose-transporting ATPase inhibitor
0,301	0,077	4-Hydroxymandelate oxidase inhibitor
0,263	0,039	Licheninase inhibitor
0,310	0,087	Adenomatous polyposis treatment
0,267	0,044	Mannitol-1-phosphatase inhibitor
0,300	0,078	Steroid N-acetylglucosaminyltransferase inhibitor

0,303	0,080	Adenylyl-sulfate reductase inhibitor
0,350	0,127	2-Hydroxyquinoline 8-monooxygenase inhibitor
0,270	0,049	Antitussive
0,264	0,044	Phosphoenolpyruvate mutase inhibitor
0,253	0,033	CNS active muscle relaxant
0,239	0,021	GST T substrate
0,239	0,021	GST T1-1 substrate
0,354	0,135	Chloride peroxidase inhibitor
0,301	0,082	3-Cyanoalanine hydratase inhibitor
0,228	0,010	3-Isopropylmalate dehydrogenase inhibitor
0,294	0,076	Mannose isomerase inhibitor
0,320	0,103	Vasodilator, coronary
0,253	0,036	Acaricide
0,278	0,061	Gluconolactonase inhibitor
0,267	0,051	Glutarate-semialdehyde dehydrogenase inhibitor
0,246	0,030	Bile-salt sulfotransferase inhibitor
0,331	0,115	GST A substrate
0,295	0,079	N-formylmethionyl-peptidase inhibitor
0,291	0,075	IgA-specific serine endopeptidase inhibitor
0,281	0,066	Glycerol-3-phosphate dehydrogenase inhibitor
0,268	0,054	Pediculicide
0,345	0,132	Aminobutyraldehyde dehydrogenase inhibitor
0,276	0,063	HIV attachment inhibitor
0,277	0,064	Fructan beta-fructosidase inhibitor
0,308	0,096	MMP9 expression inhibitor
0,242	0,031	Mucolytic
0,256	0,044	Cellulose 1,4-beta-cellobiosidase inhibitor
0,279	0,067	Ophthalmic drug
0,288	0,078	CYP2C11 substrate
0,295	0,085	Creatininase inhibitor
0,339	0,129	Sulfur reductase inhibitor
0,249	0,039	Protein synthesis inhibitor
0,264	0,054	Envelysin inhibitor
0,263	0,054	Antiprotozoal (Trichomonas)
0,261	0,052	Dopamine release stimulant
0,248	0,040	Aureolysin inhibitor
0,315	0,108	Intermittent claudication treatment

0,326	0,121	JAK2 expression inhibitor
0,255	0,049	Antiparkinsonian, tremor relieving
0,286	0,082	Isopenicillin-N epimerase inhibitor
0,341	0,137	Oxygen scavenger
0,283	0,079	Inotropic
0,289	0,086	Nitrite reductase [NAD(P)H] inhibitor
0,302	0,100	Bilirubin oxidase inhibitor
0,259	0,057	Cutinase inhibitor
0,257	0,055	Antipruritic, non-allergic
0,364	0,163	Proteasome ATPase inhibitor
0,222	0,021	Estradiol 17alpha-dehydrogenase inhibitor
0,257	0,058	CDP-diacylglycerol-glycerol-3-phosphate 3-phosphatidyltransferase inhibitor
0,252	0,053	Alpha-1,6-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase inhibitor
0,282	0,084	Methylumbelliferyl-acetate deacetylase inhibitor
0,310	0,113	Malate dehydrogenase (acceptor) inhibitor
0,293	0,096	Prostaglandin-A1 DELTA-isomerase inhibitor
0,296	0,099	Alkane 1-monooxygenase inhibitor
0,216	0,019	Beta-glucosidase inhibitor
0,236	0,039	Undecaprenyl-diphosphatase inhibitor
0,324	0,127	Vasodilator, peripheral
0,241	0,045	Hydroxysteroid dehydrogenase inhibitor
0,241	0,045	Bisphosphoglycerate mutase inhibitor
0,217	0,022	Creatinase inhibitor
0,312	0,119	3-Hydroxybenzoate 6-monooxygenase inhibitor
0,309	0,117	Aspartate-phenylpyruvate transaminase inhibitor
0,257	0,065	DNA ligase (ATP) inhibitor
0,214	0,023	Gaucher disease treatment
0,308	0,118	Cl--transporting ATPase inhibitor
0,272	0,081	Aspergillus nuclease S1 inhibitor
0,234	0,044	Aryldialkylphosphatase inhibitor
0,246	0,056	N-(long-chain-acyl)ethanolamine deacylase inhibitor
0,222	0,032	Allantoate deiminase inhibitor
0,222	0,033	Ganglioside galactosyltransferase inhibitor
0,257	0,069	Ethanolamine-phosphate cytidyltransferase inhibitor
0,306	0,119	CYP3A5 substrate
0,246	0,059	Pappalysin-1 inhibitor
0,296	0,110	CYP2E1 inducer

0,299	0,113	Malate oxidase inhibitor
0,293	0,108	TNF expression inhibitor
0,230	0,046	Expectorant
0,218	0,034	Saccharolysin inhibitor
0,296	0,113	Histidine N-acetyltransferase inhibitor
0,268	0,085	Phosphatidylserine decarboxylase inhibitor
0,217	0,035	Antiglaucomic
0,254	0,072	Trimethylamine dehydrogenase inhibitor
0,246	0,063	N-acetyllactosamine synthase inhibitor
0,195	0,013	5 Hydroxytryptamine 1A agonist
0,247	0,065	Levanase inhibitor
0,348	0,166	Taurine dehydrogenase inhibitor
0,226	0,044	Antianorexic
0,227	0,047	Alpha-amylase inhibitor
0,231	0,052	Poly(alpha-L-gulonate) lyase inhibitor
0,208	0,029	Psychosexual dysfunction treatment
0,245	0,066	Dimethylmaleate hydratase inhibitor
0,212	0,033	Protein-S-isoprenylcysteine O-methyltransferase inhibitor
0,238	0,059	Protein-Npi-phosphohistidine-sugar phosphotransferase inhibitor
0,217	0,039	Deoxyribonuclease I inhibitor
0,217	0,038	Antihypotensive
0,221	0,043	Galactose oxidase inhibitor
0,205	0,028	Adenylate cyclase inhibitor
0,284	0,107	Pro-opiomelanocortin converting enzyme inhibitor
0,305	0,127	EIF4E expression inhibitor
0,238	0,061	Ornithine cyclodeaminase inhibitor
0,240	0,063	UGT2B28 substrate
0,298	0,122	Superoxide dismutase inhibitor
0,262	0,086	Anesthetic general
0,234	0,058	N-Acyl-D-aspartate deacylase inhibitor
0,309	0,135	Antipruritic, allergic
0,241	0,066	Sulfite reductase inhibitor
0,227	0,053	Lipocortins synthesis antagonist
0,260	0,086	CYP2C29 substrate
0,254	0,080	NF-E2-related factor 2 stimulant
0,207	0,033	Glycerone-phosphate O-acyltransferase inhibitor
0,278	0,105	Antiviral (Influenza)

0,257	0,084	2-Hydroxymuconate-semialdehyde hydrolase inhibitor
0,233	0,060	Phospholipase A1 inhibitor
0,229	0,057	D-alanine 2-hydroxymethyltransferase inhibitor
0,299	0,127	Spermidine dehydrogenase inhibitor
0,221	0,050	Snalysin inhibitor
0,220	0,050	Tropinesterase inhibitor
0,233	0,063	Fumarate reductase (NADH) inhibitor
0,235	0,066	Oryzin inhibitor
0,257	0,088	Flavin-containing monooxygenase substrate
0,259	0,090	RNA synthesis inhibitor
0,237	0,068	Di-trans,poly-cis-decaprenylcistransferase inhibitor
0,258	0,089	CYP2B10 substrate
0,330	0,162	Glycerol-ether monooxygenase inhibitor
0,223	0,054	Dynein ATPase inhibitor
0,207	0,039	Mannan endo-1,6-alpha-mannosidase inhibitor
0,300	0,133	CYP4A11 substrate
0,213	0,045	CYP2B1 substrate
0,296	0,129	Amine dehydrogenase inhibitor
0,236	0,070	Carboxypeptidase D inhibitor
0,248	0,082	Transcription factor NF kappa A inhibitor
0,218	0,053	Rhizopuspepsin inhibitor
0,268	0,103	3-Phytase inhibitor
0,372	0,207	Calcium channel (voltage-sensitive) activator
0,180	0,016	Urolithiasis treatment
0,273	0,109	FMO1 substrate
0,279	0,115	RELA expression inhibitor
0,243	0,079	Aspartate-ammonia ligase inhibitor
0,178	0,014	4-Carboxymethyl-4-methylbutenolide mutase inhibitor
0,246	0,082	Mood disorders treatment
0,239	0,075	Quinoprotein glucose dehydrogenase inhibitor
0,237	0,074	Antiperistaltic
0,288	0,126	Endopeptidase So inhibitor
0,207	0,045	3-Chloro-D-alanine dehydrochlorinase inhibitor
0,219	0,057	Guanosine-3',5'-bis(diphosphate) 3'-diphosphatase inhibitor
0,211	0,049	GABA B receptor agonist
0,283	0,122	Manganese peroxidase inhibitor
0,225	0,064	Interleukin 10 agonist

0,269	0,109	Alcohol dehydrogenase (acceptor) inhibitor
0,210	0,051	Tentoxilysin inhibitor
0,241	0,082	Antidepressant
0,213	0,054	Mitochondrial intermediate peptidase inhibitor
0,292	0,134	P-glycoprotein substrate
0,218	0,061	Polygalacturonase inhibitor
0,290	0,133	S-formylglutathione hydrolase inhibitor
0,180	0,023	Glycosylphosphatidylinositol diacylglycerol-lyase inhibitor
0,217	0,060	Peptidyl-dipeptidase B inhibitor
0,252	0,095	Monoamine uptake inhibitor
0,264	0,107	Chenodeoxycholytaurine hydrolase inhibitor
0,224	0,069	3-Methylbutanal reductase inhibitor
0,244	0,089	DNA synthesis inhibitor
0,198	0,042	Endo-1,3(4)-beta-glucanase inhibitor
0,194	0,039	Diisopropyl-fluorophosphatase inhibitor
0,203	0,048	Gametolysin inhibitor
0,257	0,103	CYP4A substrate
0,253	0,099	Peptide alpha-N-acetyltransferase inhibitor
0,294	0,141	Caspase 3 stimulant
0,200	0,048	Alpha-Methylacyl-CoA racemase inhibitor
0,221	0,068	2-Oxoaldehyde dehydrogenase (NADP+) inhibitor
0,204	0,051	1,4-Alpha-glucan branching enzyme inhibitor
0,191	0,039	Phosphoinositide phospholipase C inhibitor
0,220	0,068	Cyclooxygenase substrate
0,217	0,067	Retinal dehydrogenase inhibitor
0,188	0,037	3-Ketoalidoxylamine C-N-lyase inhibitor
0,234	0,084	Cyclic AMP modulator
0,160	0,009	Alpha-L-fucosidase inhibitor
0,177	0,027	Trehalose-phosphatase inhibitor
0,201	0,051	D-xylulose reductase inhibitor
0,214	0,064	D-threo-aldose 1-dehydrogenase inhibitor
0,255	0,105	Antimetastatic
0,259	0,109	Antiinflammatory, intestinal
0,240	0,090	Antialcoholic
0,186	0,037	Galacturan 1,4-alpha-galacturonidase inhibitor
0,177	0,028	Adenylate cyclase V inhibitor
0,229	0,080	Antineoplastic (brain cancer)

0,156	0,008	Squalene-hopene cyclase inhibitor
0,203	0,054	Isopenicillin-N synthase inhibitor
0,233	0,085	Transactivator transcription protein inhibitor
0,300	0,153	Antineoplastic
0,334	0,187	Antiviral (Rhinovirus)
0,185	0,038	2,2-Dialkylglycine decarboxylase (pyruvate) inhibitor
0,253	0,107	Phosphopantothenoylcysteine decarboxylase inhibitor
0,224	0,078	Nardilysin inhibitor
0,241	0,096	Sulfite oxidase inhibitor
0,229	0,084	Glutaminyl-peptide cyclotransferase inhibitor
0,252	0,107	Tyrosine 3 hydroxylase inhibitor
0,275	0,130	CYP3A4 inducer
0,162	0,017	DELTA24-sterol reductase inhibitor
0,298	0,153	Pancreatic elastase inhibitor
0,265	0,120	CYP17 inhibitor
0,229	0,085	Linoleoyl-CoA desaturase inhibitor
0,239	0,095	Transketolase inhibitor
0,267	0,123	CYP3A inducer
0,209	0,066	Sodium channel blocker class Ib
0,155	0,012	Gentamicin 2''-nucleotidyltransferase inhibitor
0,247	0,104	Chitosanase inhibitor
0,193	0,051	5 Hydroxytryptamine 7 agonist
0,194	0,052	Aldehyde dehydrogenase (NADP+) inhibitor
0,174	0,034	Pectin lyase inhibitor
0,280	0,139	Apoptosis agonist
0,184	0,045	Retinyl-palmitate esterase inhibitor
0,170	0,031	Alpha-N-acetylgalactosaminidase inhibitor
0,146	0,007	Protein 30S ribosomal subunit inhibitor
0,327	0,188	TP53 expression enhancer
0,187	0,049	Ligase inhibitor
0,192	0,054	2-Acylglycerol O-acyltransferase inhibitor
0,227	0,090	NADH kinase inhibitor
0,173	0,037	Histamine agonist
0,245	0,109	CYP2A5 substrate
0,221	0,085	GST M substrate
0,222	0,086	Glycine amidinotransferase inhibitor
0,270	0,135	Cyanoalanine nitrilase inhibitor

0,163	0,028	CYP3A5 inducer
0,173	0,039	N4-(beta-N-acetylglucosaminy)-L-asparaginase inhibitor
0,219	0,085	Aspergillopepsin II inhibitor
0,184	0,051	Antitussive, narcotic
0,268	0,134	Glucose oxidase inhibitor
0,257	0,124	Antiviral (Herpes)
0,188	0,055	Inulinase inhibitor
0,193	0,060	Antirickettsial
0,297	0,165	Oxidoreductase inhibitor
0,206	0,074	UGT2B17 substrate
0,271	0,139	Anthelmintic (Nematodes)
0,159	0,026	Demethylsterigmatocystin 6-O-methyltransferase inhibitor
0,188	0,058	Lactaldehyde reductase inhibitor
0,236	0,106	Skeletal muscle relaxant
0,168	0,038	Riboflavin phosphotransferase inhibitor
0,179	0,049	Polar-amino-acid-transporting ATPase inhibitor
0,203	0,073	Prenyl-diphosphatase inhibitor
0,215	0,085	Methanol dehydrogenase inhibitor
0,188	0,058	tRNA nucleotidyltransferase inhibitor
0,200	0,071	Vitamin-K-epoxide reductase (warfarin-insensitive) inhibitor
0,225	0,096	Muscle relaxant
0,317	0,188	Thromboxane B2 antagonist
0,156	0,027	Narcotic antagonist
0,162	0,033	1-Aminocyclopropane-1-carboxylate deaminase inhibitor
0,206	0,077	Horriylsin inhibitor
0,278	0,149	Biotinidase inhibitor
0,173	0,044	Valine decarboxylase inhibitor
0,176	0,047	Protein synthesis stimulant
0,279	0,151	Pterin deaminase inhibitor
0,179	0,051	Methyltransferase substrate
0,187	0,059	ADP-ribosylarginine hydrolase inhibitor
0,157	0,030	Choline dehydrogenase inhibitor
0,217	0,091	[acyl-carrier-protein] S-acetyltransferase inhibitor
0,168	0,042	Glycopeptide alpha-N-acetylgalactosaminidase inhibitor
0,171	0,045	Pancreatic endopeptidase E inhibitor
0,183	0,057	Choline-sulfatase inhibitor
0,175	0,050	Sulfur dioxygenase inhibitor

0,206	0,082	Carminative
0,263	0,138	CYP3A3 substrate
0,148	0,024	Shab potassium channel blocker
0,171	0,047	2-Dehydropantoate aldolase inhibitor
0,199	0,075	Procollagen N-endopeptidase inhibitor
0,240	0,117	4-Methoxybenzoate monooxygenase (O-demethylating) inhibitor
0,167	0,044	Lysyl endopeptidase inhibitor
0,233	0,110	Aldehyde dehydrogenase (pyrroloquinoline-quinone) inhibitor
0,158	0,037	Pregnane X receptor agonist
0,167	0,046	Furin inhibitor
0,297	0,178	Thioredoxin inhibitor
0,270	0,151	Linoleate diol synthase inhibitor
0,179	0,060	Antineoplastic (renal cancer)
0,247	0,128	4-Hydroxyproline epimerase inhibitor
0,168	0,049	Ferredoxin-NADP+ reductase inhibitor
0,313	0,195	Fibrinolytic
0,182	0,064	Plasmanylethanolamine desaturase inhibitor
0,266	0,148	Leukotriene-C4 synthase inhibitor
0,226	0,109	Arylmalonate decarboxylase inhibitor
0,184	0,066	Sterol 3-beta-glucosyltransferase inhibitor
0,218	0,101	Chloride channel activator
0,191	0,074	(S)-3-amino-2-methylpropionate transaminase inhibitor
0,160	0,043	Antibacterial, ophthalmic
0,255	0,138	Antiprotozoal (Leishmania)
0,194	0,077	Phosphatidylglycerophosphatase inhibitor
0,216	0,101	Phosphatidylcholine-sterol O-acyltransferase inhibitor
0,121	0,006	Dopamine D2A antagonist
0,179	0,064	NAD+ synthase (glutamine-hydrolysing) inhibitor
0,265	0,150	Transcription factor stimulant
0,265	0,150	Transcription factor NF kappa B stimulant
0,244	0,129	Aldehyde oxidase inhibitor
0,176	0,062	Antineoplastic (thyroid cancer)
0,152	0,038	Lysozyme inhibitor
0,193	0,079	Crotonoyl-[acyl-carrier-protein] hydratase inhibitor
0,229	0,116	Pyruvate decarboxylase inhibitor
0,196	0,083	Cyclopropane-fatty-acyl-phospholipid synthase inhibitor
0,169	0,056	Glycerol-1-phosphatase inhibitor

0,249	0,136	Dehydro-L-gulonate decarboxylase inhibitor
0,214	0,102	Coccolysin inhibitor
0,196	0,084	Ubiquitin thiolesterase inhibitor
0,180	0,068	Gamma-butyrobetaine dioxygenase inhibitor
0,223	0,112	Lipid peroxidase inhibitor
0,336	0,225	Nicotinic alpha4beta4 receptor agonist
0,190	0,080	Indoleacetaldoxime dehydratase inhibitor
0,165	0,054	Alcohol dehydrogenase inhibitor
0,183	0,072	Glutamate 5-kinase inhibitor
0,197	0,087	CYP2A3 substrate
0,204	0,094	Cyclohexyl-isocyanide hydratase inhibitor
0,217	0,107	DNA-3-methyladenine glycosylase I inhibitor
0,186	0,077	Antinaupathic
0,126	0,017	Sodium/hydrogen exchanger 5 inhibitor
0,225	0,116	Gingipain K inhibitor
0,255	0,146	Lipoprotein lipase inhibitor
0,215	0,106	UGT2B4 substrate
0,189	0,081	Tauropine dehydrogenase inhibitor
0,164	0,056	Phosphoenolpyruvate-protein phosphotransferase inhibitor
0,141	0,033	2-Aminoethylphosphonate-pyruvate transaminase inhibitor
0,213	0,106	Arylesterase inhibitor
0,116	0,009	Alpha-mannosidase inhibitor
0,237	0,130	Antiamyloidogenic
0,202	0,094	Bontoxilysin inhibitor
0,256	0,149	HCV IRES inhibitor
0,159	0,052	Endoglycosylceramidase inhibitor
0,125	0,018	CC chemokine 4 receptor antagonist
0,182	0,075	Sweetener
0,175	0,068	Stromelysin 2 inhibitor
0,147	0,040	(S)-carnitine 3-dehydrogenase inhibitor
0,158	0,052	Pectate lyase inhibitor
0,217	0,111	Methane monooxygenase inhibitor
0,138	0,033	Beta-D-fucosidase inhibitor
0,121	0,016	Imidazoleglycerol-phosphate dehydratase inhibitor
0,235	0,131	Arylsulfate sulfotransferase inhibitor
0,234	0,130	Antiviral (Influenza A)
0,166	0,062	3-Carboxyethylcatechol 2,3-dioxygenase inhibitor

0,162	0,058	UGT2B18 substrate
0,211	0,108	NOS2 expression inhibitor
0,211	0,108	CYP2B substrate
0,184	0,081	UGT2B10 substrate
0,165	0,063	Lipotropic
0,186	0,083	Rhodotorulapepsin inhibitor
0,163	0,060	Adenylate cyclase stimulant
0,204	0,101	Diamine N-acetyltransferase inhibitor
0,155	0,053	Restless leg syndrome treatment
0,175	0,072	Alpha-glucuronidase inhibitor
0,222	0,120	CYP2C6 substrate
0,175	0,073	Nitric oxide scavenger
0,182	0,080	Anesthetic
0,172	0,070	Aspartoacylase inhibitor
0,197	0,096	Gamma-D-Glutamyl-meso-diaminopimelate peptidase inhibitor
0,163	0,063	Glutamate (mGluR5) agonist
0,157	0,057	Cellulase inhibitor
0,141	0,042	Heparan-alpha-glucosaminide N-acetyltransferase inhibitor
0,187	0,087	Serine-pyruvate transaminase inhibitor
0,238	0,139	(S)-6-hydroxynicotine oxidase inhibitor
0,197	0,098	Nucleoside oxidase (H2O2-forming) inhibitor
0,201	0,102	1,2-alpha-L-fucosidase inhibitor
0,248	0,150	Immunosuppressant
0,131	0,033	Phosphatidylinositol 3-kinase stimulant
0,162	0,064	Glucan 1,4-beta-glucosidase inhibitor
0,226	0,128	Glutamate-tRNA ligase inhibitor
0,143	0,045	Cholate-CoA ligase inhibitor
0,271	0,173	Muramoyltetrapeptide carboxypeptidase inhibitor
0,126	0,028	Arabinose isomerase inhibitor
0,153	0,056	BRAF expression inhibitor
0,206	0,108	CYP2B2 substrate
0,114	0,017	Acetylcholine M3 receptor agonist
0,146	0,050	Agmatinase inhibitor
0,150	0,054	N-(5-amino-5-carboxypentanoyl)-L-cysteinyl-D-valine synthase inhibitor
0,272	0,176	(R)-6-hydroxynicotine oxidase inhibitor
0,182	0,086	Nicotinic alpha4beta2 receptor antagonist
0,141	0,045	Aldehyde dehydrogenase [NAD(P)+] inhibitor

0,141	0,045	Choloylglycine hydrolase inhibitor
0,221	0,126	Choline-phosphate cytidyltransferase inhibitor
0,234	0,139	L-glutamate oxidase inhibitor
0,190	0,096	Bisphosphoglycerate phosphatase inhibitor
0,141	0,047	CYP19 inhibitor
0,179	0,085	Arachidonic acid antagonist
0,247	0,153	Lysyl oxidase inhibitor
0,144	0,050	Obsessive-compulsive disorder treatment
0,169	0,075	Serratia marcescens nuclease inhibitor
0,195	0,102	Meprin B inhibitor
0,248	0,155	Mitochondrial processing peptidase inhibitor
0,156	0,064	Aspartate-tRNA ligase inhibitor
0,162	0,070	Farnesyltranstransferase inhibitor
0,098	0,006	Antibiotic Aminoglycoside-like
0,222	0,131	N-benzyloxycarbonylglycine hydrolase inhibitor
0,174	0,084	Polyneuridine-aldehyde esterase inhibitor
0,216	0,126	4-Nitrophenylphosphatase inhibitor
0,186	0,097	Polarisation inhibitor
0,133	0,043	Glutamate release inhibitor
0,164	0,075	Sphinganine-1-phosphate aldolase inhibitor
0,160	0,070	Trans-pentaprenyltranstransferase inhibitor
0,189	0,100	Spasmolytic, Papaverin-like
0,136	0,047	Trimethyllysine dioxygenase inhibitor
0,239	0,150	CYP2A8 substrate
0,213	0,124	Phospholipase C inhibitor
0,187	0,099	Morphine 6-dehydrogenase inhibitor
0,132	0,044	Ribonuclease inhibitor
0,168	0,080	UGT1A5 substrate
0,151	0,063	Peristaltic stimulant
0,205	0,117	Antifibrinolytic
0,270	0,182	CYP2C8 substrate
0,117	0,031	Galactosylgalactosylglucosylceramidase inhibitor
0,157	0,071	N-Acyl-D-amino-acid deacylase inhibitor
0,130	0,043	Cytochrome-c3 hydrogenase inhibitor
0,124	0,037	Squalene epoxidase inhibitor
0,221	0,135	Naphthalene 1,2-dioxygenase inhibitor
0,221	0,135	Ferredoxin-NAD+ reductase inhibitor

0,253	0,167	Polarisation stimulant
0,117	0,032	Acetylcholine M2 receptor agonist
0,194	0,109	Opheline kinase inhibitor
0,194	0,109	Taurocyamine kinase inhibitor
0,202	0,117	Endopeptidase La inhibitor
0,132	0,048	Secretase stimulant
0,132	0,048	Secretase alpha stimulant
0,150	0,065	Insecticide
0,145	0,061	Aminocarboxymuconate-semialdehyde decarboxylase inhibitor
0,190	0,106	Ceramide glucosyltransferase inhibitor
0,137	0,053	Serine 3-dehydrogenase inhibitor
0,097	0,013	Mannosidase inhibitor
0,107	0,023	Fatty-acyl-ethyl-ester synthase inhibitor
0,109	0,026	5 Hydroxytryptamine 1 agonist
0,192	0,109	Thiol oxidase inhibitor
0,142	0,059	Selenocysteine lyase inhibitor
0,220	0,138	DNA-(apurinic or apyrimidinic site) lyase inhibitor
0,087	0,004	FtsZ polymerization inhibitor
0,163	0,081	Glyoxylate reductase (NADP+) inhibitor
0,109	0,027	High-mannose-oligosaccharide beta-1,4-N-acetylglucosaminyltransferase inhibitor
0,163	0,082	6-Pyruvoyltetrahydropterin synthase inhibitor
0,143	0,062	Alpha-N-arabinofuranosidase inhibitor
0,182	0,101	Alanine-tRNA ligase inhibitor
0,111	0,030	Homoserine O-succinyltransferase inhibitor
0,144	0,064	Dolichyl-phosphatase inhibitor
0,120	0,040	Lysine decarboxylase inhibitor
0,098	0,018	Anesthetic inhalation
0,106	0,027	Amylo-alpha-1,6-glucosidase inhibitor
0,136	0,056	Carnitine dehydratase inhibitor
0,163	0,083	Styrene-oxide isomerase inhibitor
0,114	0,034	Ca2+-transporting ATPase inhibitor
0,104	0,025	Polyamine biosynthesis inhibitor
0,211	0,132	4-Coumarate-CoA ligase inhibitor
0,168	0,089	Myeloblastin inhibitor
0,157	0,079	CYP2B18 substrate
0,158	0,081	UGT2B9 substrate
0,251	0,174	Antiinflammatory, ophthalmic

0,208	0,131	tRNA-pseudouridine synthase I inhibitor
0,167	0,090	Leucine dehydrogenase inhibitor
0,270	0,193	Nicotine dehydrogenase inhibitor
0,144	0,067	Protein-tyrosine sulfotransferase inhibitor
0,166	0,089	Uterine stimulant
0,130	0,054	Cholesterol oxidase inhibitor
0,187	0,112	Diabetic nephropathy treatment
0,216	0,141	Antiviral (CMV)
0,155	0,081	Acetylspermidine deacetylase inhibitor
0,168	0,094	Cyclopentanone monooxygenase inhibitor
0,138	0,064	Allantoinase inhibitor
0,121	0,047	4-Alpha-glucanotransferase inhibitor
0,141	0,067	Valine-tRNA ligase inhibitor
0,253	0,179	Nitrate reductase (cytochrome) inhibitor
0,189	0,115	Peroxidase substrate
0,177	0,104	Interleukin 6 antagonist
0,121	0,048	Rhodopsin kinase inhibitor
0,271	0,198	Pin1 inhibitor
0,168	0,095	Vascular adhesion protein 1 inhibitor
0,249	0,177	Centromere associated protein inhibitor
0,105	0,032	Homospermidine synthase inhibitor
0,221	0,149	HMOX1 expression enhancer
0,106	0,034	L-fuconate dehydratase inhibitor
0,134	0,062	Glucan 1,6-alpha-glucosidase inhibitor
0,132	0,060	CYP19 substrate
0,189	0,117	Glutathione dehydrogenase (ascorbate) inhibitor
0,129	0,057	Diacylglycerol cholinephosphotransferase inhibitor
0,153	0,082	Allyl-alcohol dehydrogenase inhibitor
0,115	0,043	Diaminopropionate ammonia-lyase inhibitor
0,145	0,074	Testosterone 17beta-dehydrogenase inhibitor
0,134	0,063	Glutamate-1-semialdehyde 2,1-aminomutase inhibitor
0,200	0,130	Cathepsin T inhibitor
0,094	0,023	Alpha,alpha-trehalose phosphorylase inhibitor
0,119	0,049	2-Aminohexano-6-lactam racemase inhibitor
0,133	0,063	Protein-glucosylgalactosylhydroxylysine glucosidase inhibitor
0,161	0,091	Microtubule formation inhibitor
0,113	0,043	Globoside alpha-N-acetylgalactosaminyltransferase inhibitor

0,108	0,038	Ribonuclease U2 inhibitor
0,109	0,039	Beta-amylase inhibitor
0,156	0,086	Carnosine synthase inhibitor
0,083	0,013	Glutamate (mGluR3) agonist
0,139	0,071	Corticosteroid antagonist
0,132	0,064	(S)-2-hydroxy-acid oxidase inhibitor
0,119	0,051	Site-specific DNA-methyltransferase (adenine-specific) inhibitor
0,184	0,116	Alcohol dehydrogenase [NAD(P)+] inhibitor
0,120	0,053	Hyperprolactinemia treatment
0,116	0,049	Ribitol 2-dehydrogenase inhibitor
0,135	0,068	Thiamine-phosphate kinase inhibitor
0,210	0,143	Antiviral (Poxvirus)
0,072	0,005	GHS receptor antagonist
0,103	0,036	Neolactotetraosylceramide alpha-2,3-sialyltransferase inhibitor
0,122	0,056	Glycerol-3-phosphate O-acyltransferase inhibitor
0,106	0,040	Ribose-5-phosphate-ammonia ligase inhibitor
0,112	0,046	Glutamine-pyruvate transaminase inhibitor
0,144	0,079	Acylaminoacyl-peptidase inhibitor
0,154	0,089	Anthranilate-CoA ligase inhibitor
0,108	0,043	UDP-N-acetylglucosamine diphosphorylase inhibitor
0,180	0,115	Acyl-CoA oxidase inhibitor
0,153	0,088	2,4-Dichlorophenol 6-monooxygenase inhibitor
0,082	0,018	Acetylcholine muscarinic agonist
0,088	0,023	2,3-Oxidosqualene-lanosterol cyclase inhibitor
0,222	0,158	Cardioprotectant
0,115	0,051	NMDA receptor polyamine site antagonist
0,098	0,034	11-Cis-retinyl-palmitate hydrolase inhibitor
0,135	0,071	Ethanolaminephosphotransferase inhibitor
0,141	0,077	Acetylenecarboxylate hydratase inhibitor
0,116	0,052	Succinate dehydrogenase inhibitor
0,297	0,233	CYP2C8 inhibitor
0,112	0,049	Inositol-polyphosphate 5-phosphatase inhibitor
0,112	0,049	Pyridoxal kinase inhibitor
0,129	0,066	Polyamine oxidase inhibitor
0,200	0,138	CYP2C3 substrate
0,096	0,034	5 Hydroxytryptamine 1A antagonist
0,117	0,055	D-Ornithine 4,5-aminomutase inhibitor

0,205	0,143	CYP2F1 substrate
0,098	0,036	Amino-acid racemase inhibitor
0,136	0,074	GABA inverse agonist
0,136	0,074	GABA A inverse agonist
0,110	0,048	Cytokine modulator
0,109	0,048	Glycerophosphocholine cholinephosphodiesterase inhibitor
0,106	0,045	Antineoplastic antibiotic
0,086	0,025	Beta galactosidase inhibitor
0,293	0,232	Diabetic neuropathy treatment
0,124	0,064	Methionine decarboxylase inhibitor
0,120	0,060	Endo-1,4-beta-xylanase inhibitor
0,145	0,085	Homoserine dehydrogenase inhibitor
0,157	0,097	Sedoheptulose-bisphosphatase inhibitor
0,124	0,064	Mevalonate kinase inhibitor
0,231	0,172	Glutathione thiolesterase inhibitor
0,134	0,075	Glucuronolactone reductase inhibitor
0,126	0,067	Acyl-lysine deacylase inhibitor
0,125	0,066	2-Oxoisovalerate dehydrogenase (acylating) inhibitor
0,108	0,049	Tyrosine-protein kinase TYRO 10 inhibitor
0,113	0,054	Putrescine oxidase inhibitor
0,183	0,125	Aromatic-hydroxylamine O-acetyltransferase inhibitor
0,233	0,174	Antiinfective
0,141	0,083	Procollagen C-endopeptidase inhibitor
0,084	0,026	Arabinogalactan endo-1,4-beta-galactosidase inhibitor
0,131	0,073	Gingipain R inhibitor
0,112	0,054	Glyceraldehyde-3-phosphate dehydrogenase (phosphorylating) inhibitor
0,125	0,068	Thiol S-methyltransferase inhibitor
0,154	0,097	Antineoplastic (lung cancer)
0,137	0,080	CYP2E1 inhibitor
0,177	0,121	Antihematotoxic
0,188	0,132	Acetylserotonin O-methyltransferase inhibitor
0,142	0,085	Aminopeptidase Y inhibitor
0,124	0,068	Glucan endo-1,3-alpha-glucosidase inhibitor
0,122	0,067	Deoxyribose-phosphate aldolase inhibitor
0,070	0,015	CYP24 substrate
0,090	0,035	Alpha-1,6-mannosyl-glycoprotein 6-beta-N-acetylglucosaminyltransferase inhibitor
0,109	0,054	Gluconate dehydratase inhibitor

0,159	0,104	Metallocoxyypeptidase D inhibitor
0,117	0,062	Xylose isomerase inhibitor
0,110	0,056	Aerobactin synthase inhibitor
0,184	0,130	Dactylisin inhibitor
0,112	0,057	Omega-amidase inhibitor
0,181	0,127	Prolyl aminopeptidase inhibitor
0,132	0,078	Cerebroside-sulfatase inhibitor
0,119	0,067	Neuropsin inhibitor
0,117	0,064	Glucarate dehydratase inhibitor
0,090	0,038	Alpha 2a adrenoreceptor antagonist
0,096	0,043	5 Hydroxytryptamine agonist
0,106	0,054	Leucine-tRNA ligase inhibitor
0,111	0,059	Pantothenase inhibitor
0,119	0,067	Carboxymethylenebutenolidase inhibitor
0,094	0,042	Shock treatment
0,112	0,060	D-arabinonolactone oxidase inhibitor
0,155	0,104	Maleate isomerase inhibitor
0,152	0,100	UGT2B7 substrate
0,083	0,032	Peptidoglycan beta-N-acetylmuramidase inhibitor
0,093	0,042	Argininosuccinate lyase inhibitor
0,124	0,073	CYP26A substrate
0,131	0,080	CYP4B substrate
0,101	0,050	Heme oxygenase inhibitor
0,076	0,025	NMDA receptor polyamine site agonist
0,110	0,059	Allantoicase inhibitor
0,246	0,195	Muscular dystrophy treatment
0,091	0,041	N-acetylglucosamine-6-phosphate deacetylase inhibitor
0,116	0,066	Dethiobiotin synthase inhibitor
0,149	0,099	Antimycoplasmal
0,211	0,161	CYP2B6 substrate
0,115	0,066	Aspartate kinase inhibitor
0,095	0,046	Oligo-1,6-glucosidase inhibitor
0,114	0,065	L-lysine 6-transaminase inhibitor
0,205	0,156	CYP2C18 substrate
0,062	0,013	Neuraminidase inhibitor
0,134	0,085	Peptidylamidoglycolate lyase inhibitor
0,107	0,058	Sorbose dehydrogenase inhibitor

0,120	0,071	Cocain dependency treatment
0,138	0,089	IgA-specific metalloendopeptidase inhibitor
0,222	0,173	Nicotinate dehydrogenase inhibitor
0,117	0,069	ATP adenylyltransferase inhibitor
0,113	0,065	Arginine deiminase inhibitor
0,119	0,071	UDP-N-acetylglucosamine-dolichyl-phosphate N-acetylglucosaminephosphotransferase inhibitor
0,097	0,050	Proline dehydrogenase inhibitor
0,119	0,072	Carnitine 3-dehydrogenase inhibitor
0,148	0,101	Rhamnulose-1-phosphate aldolase inhibitor
0,202	0,155	Cell wall biosynthesis inhibitor
0,107	0,061	Aminoacylase inhibitor
0,125	0,078	Tardive dyskinesia treatment
0,151	0,105	Male reproductive disfunction treatment
0,181	0,134	TRPA1 agonist
0,106	0,060	Phosphatidate cytidyltransferase inhibitor
0,140	0,094	Trans-2-enoyl-CoA reductase (NAD+) inhibitor
0,140	0,094	Pyruvate dehydrogenase (cytochrome) inhibitor
0,104	0,058	Poly(3-hydroxybutyrate) depolymerase inhibitor
0,115	0,069	5 Hydroxytryptamine 4A antagonist
0,147	0,102	N-acetyl-gamma-glutamyl-phosphate reductase inhibitor
0,119	0,074	D-Octopine dehydrogenase inhibitor
0,140	0,094	Oxalate oxidase inhibitor
0,166	0,120	Opine dehydrogenase inhibitor
0,205	0,160	Cytochrome-b5 reductase inhibitor
0,114	0,068	NADH dehydrogenase inhibitor
0,151	0,106	Aldehyde dehydrogenase 2 substrate
0,130	0,085	CDP-diacylglycerol-inositol 3-phosphatidyltransferase inhibitor
0,080	0,035	Formimidoylglutamase inhibitor
0,125	0,081	Galactokinase inhibitor
0,175	0,131	Protein-synthesizing GTPase inhibitor
0,116	0,072	Diacylglycerol kinase inhibitor
0,072	0,028	Alpha-1,6-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase inhibitor
0,100	0,057	Acetylcholine agonist
0,190	0,147	Succinate-semialdehyde dehydrogenase [NAD(P)+] inhibitor
0,111	0,068	UGT2B11 substrate
0,103	0,060	Ornithine-oxo-acid transaminase inhibitor
0,159	0,117	Urate-ribonucleotide phosphorylase inhibitor

0,081	0,039	CYP4F12 substrate
0,125	0,083	Anesthetic local
0,130	0,087	Antineoplastic (gastric cancer)
0,076	0,034	3-Alpha-hydroxysteroid dehydrogenase (B-specific) inhibitor
0,145	0,102	3-Hydroxybutyryl-CoA dehydrogenase inhibitor
0,145	0,102	2,4-Diaminopentanoate dehydrogenase inhibitor
0,145	0,102	Lysine 6-dehydrogenase inhibitor
0,091	0,049	Phosphatidylglycerol-membrane-oligosaccharide glycerophosphotransferase inhibitor
0,113	0,071	D-2-hydroxy-acid dehydrogenase inhibitor
0,153	0,111	GABA C receptor agonist
0,154	0,112	Prunasin beta-glucosidase inhibitor
0,130	0,089	Gly-X carboxypeptidase inhibitor
0,143	0,102	CYP2C8 inducer
0,073	0,031	Chitin deacetylase inhibitor
0,124	0,083	N-acetylneuraminate synthase inhibitor
0,101	0,059	Thermomycin inhibitor
0,081	0,040	4a-Hydroxytetrahydrobiopterin dehydratase inhibitor
0,085	0,043	Alpha glucosidase inhibitor
0,096	0,055	Bis(5'-adenosyl)-triphosphatase inhibitor
0,066	0,025	Glucan 1,3-alpha-glucosidase inhibitor
0,082	0,041	mRNA (guanine-N7-)-methyltransferase inhibitor
0,200	0,159	Formate-dihydrofolate ligase inhibitor
0,088	0,048	(R)-aminopropanol dehydrogenase inhibitor
0,189	0,149	Anti-Helicobacter pylori
0,131	0,091	Alkene monooxygenase inhibitor
0,093	0,053	Alpha 2c adrenoreceptor antagonist
0,060	0,020	CC chemokine 2 receptor antagonist
0,075	0,035	Glutathione reductase stimulant
0,075	0,035	Glutathione reductase (NADPH) stimulant
0,226	0,186	Retinoic acid metabolism inhibitor
0,095	0,055	1,5-Anhydro-D-fructose reductase inhibitor
0,123	0,083	Aldehyde dehydrogenase (NAD+) inhibitor
0,094	0,055	Beta-N-acetylgalactosaminidase inhibitor
0,075	0,036	Inositol 1,4,5-triphosphate receptor antagonist
0,134	0,095	Nuclease inhibitor
0,114	0,075	Glucosamine-6-phosphate deaminase inhibitor
0,169	0,130	Renal tissue kallikrein inhibitor

0,125	0,086	Cysteine synthase inhibitor
0,137	0,098	Geranylgeranyl-diphosphate geranylgeranyltransferase inhibitor
0,061	0,023	Na ⁺ K ⁺ transporting ATPase inhibitor
0,096	0,058	Valine dehydrogenase (NADP ⁺) inhibitor
0,154	0,115	Antiprotozoal (Plasmodium)
0,255	0,217	2-Dehydropantoate 2-reductase inhibitor
0,118	0,080	Prepilin peptidase inhibitor
0,118	0,080	Haloacetate dehalogenase inhibitor
0,065	0,027	Glycine N-choloyltransferase inhibitor
0,193	0,156	Vasodilator
0,142	0,104	4-Chlorophenylacetate 3,4-dioxygenase inhibitor
0,112	0,075	Anabolic
0,218	0,181	H ⁺ -transporting two-sector ATPase inhibitor
0,060	0,024	Biotin-[methylmalonyl-CoA-carboxytransferase] ligase inhibitor
0,132	0,096	Glutamate synthase (ferredoxin) inhibitor
0,131	0,094	Oligopeptidase B inhibitor
0,135	0,098	Thioredoxin reductase inhibitor
0,121	0,085	Cancer procoagulant inhibitor
0,117	0,081	8-Amino-7-oxononanoate synthase inhibitor
0,110	0,074	(R)-limonene 6-monooxygenase inhibitor
0,049	0,013	CYP4F8 substrate
0,125	0,089	Guanylate cyclase stimulant
0,159	0,124	Lymphocytopoiesis inhibitor
0,129	0,094	Hepatocyte nuclear factor antagonist
0,129	0,094	Hepatocyte nuclear factor 4 alpha antagonist
0,136	0,101	4-Chlorobenzoyl-CoA dehalogenase inhibitor
0,137	0,102	Alkylglycerone-phosphate synthase inhibitor
0,078	0,043	Alpha adrenoreceptor agonist
0,102	0,068	Galactoside 2-alpha-L-fucosyltransferase inhibitor
0,155	0,120	Thermitase inhibitor
0,073	0,039	Deoxyhypusine synthase inhibitor
0,111	0,076	Renal failure treatment
0,122	0,088	Interferon antagonist
0,056	0,022	Anhydrotetracycline monooxygenase inhibitor
0,179	0,145	Cholestanetriol 26-monooxygenase inhibitor
0,128	0,094	Glutamin-(asparagin-)ase inhibitor
0,125	0,091	Candidapepsin inhibitor

0,087	0,053	Galactosylceramidase inhibitor
0,097	0,064	Aspartate transaminase inhibitor
0,077	0,043	L-aminoadipate-semialdehyde dehydrogenase inhibitor
0,129	0,095	Penicillopepsin inhibitor
0,105	0,072	Constipation treatment
0,117	0,084	Cathepsin H inhibitor
0,320	0,287	CDP-glycerol glycerophosphotransferase inhibitor
0,087	0,054	Guanidinopropionase inhibitor
0,107	0,074	NAD(P)+ transhydrogenase (AB-specific) inhibitor
0,076	0,044	Alternansucrase inhibitor
0,115	0,082	L-iduronidase inhibitor
0,173	0,140	O-aminophenol oxidase inhibitor
0,180	0,148	L-threonine 3-dehydrogenase inhibitor
0,073	0,041	UGT2B7H substrate
0,073	0,041	UGT2B7Y substrate
0,093	0,061	Glycerol dehydratase inhibitor
0,079	0,047	Glycerophosphocholine phosphodiesterase inhibitor
0,169	0,137	Antihypercholesterolemic
0,247	0,216	RNA-directed RNA polymerase inhibitor
0,100	0,069	Glutamate N-acetyltransferase inhibitor
0,063	0,031	D-Serine ammonia-lyase inhibitor
0,086	0,054	Cellobiose phosphorylase inhibitor
0,140	0,109	Inorganic diphosphatase inhibitor
0,058	0,026	Potassium channel Kv1.3 blocker
0,183	0,152	Hepatoprotectant
0,074	0,043	Alpha-L-rhamnosidase inhibitor
0,076	0,044	5 Hydroxytryptamine 1 antagonist
0,072	0,041	Sleep apnea treatment
0,158	0,127	Mandelate 4-monooxygenase inhibitor
0,136	0,104	Phosphatidate phosphatase inhibitor
0,192	0,161	AR expression inhibitor
0,152	0,121	Endopeptidase inhibitor
0,118	0,087	Acylglycerone-phosphate reductase inhibitor
0,117	0,086	Allophanate hydrolase inhibitor
0,079	0,049	Beta 1 adrenoreceptor agonist
0,138	0,107	Anthranilate 3-monooxygenase (deaminating) inhibitor
0,090	0,060	CYP4F substrate

0,079	0,049	Aspartate-semialdehyde dehydrogenase inhibitor
0,098	0,068	Aspartate-ammonia ligase (ADP-forming) inhibitor
0,118	0,088	Interferon gamma antagonist
0,036	0,006	Sigma 3 receptor antagonist
0,136	0,106	3-Hydroxy-4-oxoquinoline 2,4-dioxygenase inhibitor
0,200	0,171	Venom exonuclease inhibitor
0,127	0,098	3-Aminobutyryl-CoA ammonia-lyase inhibitor
0,096	0,066	Homocysteine desulfhydrase inhibitor
0,109	0,080	Isovaleryl-CoA dehydrogenase inhibitor
0,036	0,007	Cholesterol ester transfer protein antagonist
0,136	0,107	Tryptophan dimethylallyltransferase inhibitor
0,083	0,054	Sterol 24-C-methyltransferase inhibitor
0,059	0,031	Glucan 1,4-alpha-glucosidase inhibitor
0,172	0,144	Antibacterial
0,087	0,059	Necroptosis inhibitor
0,097	0,070	DNA nucleotidylexotransferase inhibitor
0,080	0,053	Anticholelithogenic
0,060	0,033	CMP-KDO synthase inhibitor
0,135	0,108	SMN2 expression enhancer
0,180	0,154	Lactose synthase inhibitor
0,082	0,055	Ribulose-bisphosphate carboxylase inhibitor
0,077	0,051	Steroid sulfotransferase inhibitor
0,045	0,019	Glucosylceramidase inhibitor
0,179	0,152	Reductant
0,142	0,116	Glycine C-acetyltransferase inhibitor
0,058	0,032	D-Alanine-poly(phosphoribitol) ligase inhibitor
0,148	0,122	Skin irritation, inactive
0,103	0,078	Phosphonoacetate hydrolase inhibitor
0,062	0,037	Hyperparathyroidism treatment
0,170	0,145	Uroporphyrinogen-III synthase inhibitor
0,074	0,049	Inositol-3-phosphate synthase inhibitor
0,105	0,080	Acetolactate decarboxylase inhibitor
0,047	0,022	Glutamate (mGluR2) agonist
0,094	0,069	CMP-N-acetylneuraminate monooxygenase inhibitor
0,074	0,049	CYP2C2 substrate
0,105	0,081	Poly(ADP-ribose) glycohydrolase inhibitor
0,128	0,104	Glucosyl transferase inhibitor

0,052	0,028	Premature ejaculation treatment
0,158	0,134	Glyoxylate oxidase inhibitor
0,053	0,029	Sucrose-phosphate phosphatase inhibitor
0,104	0,080	2-Aminoadipate transaminase inhibitor
0,058	0,035	Sucrose alpha-glucosidase inhibitor
0,136	0,113	Acetylnornithine deacetylase inhibitor
0,076	0,053	Isoamylase inhibitor
0,099	0,076	Dopamine D2S antagonist
0,076	0,053	Opioid mu 2 receptor antagonist
0,081	0,059	Acetylcholine muscarinic antagonist
0,042	0,020	Endo-beta-N-acetylglucosaminidase inhibitor
0,112	0,090	Biotin carboxylase inhibitor
0,159	0,137	Pitrilysin inhibitor
0,102	0,080	Cysteine desulfurase inhibitor
0,078	0,056	Paget's disease treatment
0,047	0,026	Glutamate (mGluR group II) agonist
0,099	0,078	MAP kinase kinase 7 inhibitor
0,101	0,080	D-lactate dehydrogenase (cytochrome) inhibitor
0,150	0,129	Urticaria treatment
0,096	0,075	Cyclooxygenase 1 substrate
0,101	0,080	NAD+ kinase inhibitor
0,053	0,033	CYP17 substrate
0,086	0,065	Dichloromuconate cycloisomerase inhibitor
0,088	0,068	Alpha,alpha-trehalase inhibitor
0,103	0,083	Fructose-2,6-bisphosphate 2-phosphatase inhibitor
0,174	0,154	Tankyrase inhibitor
0,144	0,124	CYP4A2 substrate
0,105	0,085	Glycogen (starch) synthase inhibitor
0,101	0,082	Decylcitrate synthase inhibitor
0,081	0,062	Arginyltransferase inhibitor
0,125	0,106	Brachyurin inhibitor
0,153	0,134	Fibromyalgia syndrome treatment
0,091	0,072	Cytosole dipeptidase inhibitor
0,031	0,012	Alpha 2b adrenoreceptor agonist
0,105	0,087	Glycoprotein 3-alpha-L-fucosyltransferase inhibitor
0,087	0,068	2-Dehydropantolactone reductase (A-specific) inhibitor
0,083	0,065	Chelator

0,091	0,073	Ketohexokinase inhibitor
0,052	0,034	Spermidine synthase inhibitor
0,108	0,090	Pyruvate dehydrogenase inhibitor
0,071	0,054	Dihydrolipoamide S-acetyltransferase inhibitor
0,082	0,064	Nitrile hydratase inhibitor
0,109	0,092	3-Isopropylmalate dehydratase inhibitor
0,055	0,038	Osmotic diuretic
0,139	0,122	Camphor 1,2-monooxygenase inhibitor
0,152	0,134	Antineoplastic (endocrine cancer)
0,187	0,170	CYP2A substrate
0,122	0,105	Chitin synthase inhibitor
0,138	0,122	Hydroxymethylglutaryl-CoA lyase inhibitor
0,132	0,116	N-acetylneuraminate 4-O-acetyltransferase inhibitor
0,124	0,107	VCAM1 expression inhibitor
0,175	0,159	Cis-1,2-dihydro-1,2-dihydroxynaphthalene dehydrogenase inhibitor
0,064	0,048	Steroid DELTA-isomerase inhibitor
0,095	0,079	Chondroitin 6-sulfotransferase inhibitor
0,077	0,061	Retinol O-fatty-acyltransferase inhibitor
0,093	0,078	Beta-mannosidase inhibitor
0,094	0,078	Glycoprotein-fucosylgalactoside alpha-N-acetylgalactosaminyltransferase inhibitor
0,105	0,090	O-acetylhomoserine aminocarboxypropyltransferase inhibitor
0,110	0,095	2-Oxoglutarate decarboxylase inhibitor
0,036	0,021	Gentamicin 3'-N-acetyltransferase inhibitor
0,064	0,049	CYP24 inhibitor
0,030	0,015	Alpha glucosidase I inhibitor
0,148	0,133	Dihydroxy-acid dehydratase inhibitor
0,136	0,122	Glutathione peroxidase inhibitor
0,081	0,067	UDP-N-acetylglucosamine 2-epimerase inhibitor
0,065	0,051	Corticotropin releasing factor antagonist
0,141	0,128	Laxative
0,095	0,082	Malyl-CoA lyase inhibitor
0,067	0,054	3(or 17)alpha-hydroxysteroid dehydrogenase inhibitor
0,065	0,052	Xylan 1,4-beta-xylosidase inhibitor
0,146	0,133	Choleretic
0,052	0,039	D-lactate-2-sulfatase inhibitor
0,080	0,067	Phosphorylase kinase inhibitor
0,097	0,085	Antibiotic

0,165	0,152	Carbon-monoxide dehydrogenase inhibitor
0,132	0,120	Polynucleotide 5'-hydroxy-kinase inhibitor
0,039	0,027	Isopentenyl-diphosphate DELTA-isomerase inhibitor
0,055	0,043	Alpha,alpha-trehalose phosphorylase (configuration-retaining) inhibitor
0,073	0,061	Cyanate hydratase inhibitor
0,061	0,049	Beta-1,4-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase inhibitor
0,066	0,054	Alpha 3 adrenoreceptor agonist
0,150	0,138	Bothrolysin inhibitor
0,184	0,172	Myosin ATPase inhibitor
0,300	0,288	Antieczematic
0,053	0,042	Assemblin inhibitor
0,064	0,052	Lactaldehyde dehydrogenase inhibitor
0,040	0,028	Antimitotic, Podophyllotoxin-like
0,073	0,061	Mycodextranase inhibitor
0,058	0,047	Opioid mu 1 receptor antagonist
0,074	0,063	3(or 17)beta-hydroxysteroid dehydrogenase inhibitor
0,138	0,127	Guanidinoacetate kinase inhibitor
0,016	0,004	Alcohol dehydrogenase gamma inhibitor
0,016	0,004	Alcohol dehydrogenase gamma 2 inhibitor
0,081	0,070	CYP26 substrate
0,128	0,117	Heat shock protein agonist
0,081	0,070	D-proline reductase (dithiol) inhibitor
0,134	0,123	Choline kinase inhibitor
0,185	0,174	Plastoquinol-plastocyanin reductase inhibitor
0,041	0,030	Strombine dehydrogenase inhibitor
0,109	0,099	CYP4B1 substrate
0,062	0,051	Alpha,alpha-phosphotrehalase inhibitor
0,081	0,070	Alpha 2b adrenoreceptor antagonist
0,075	0,064	N-acetylneuraminate lyase inhibitor
0,133	0,122	Antineoplastic (melanoma)
0,081	0,071	Trimerelysin II inhibitor
0,096	0,085	Lactaldehyde reductase (NADPH) inhibitor
0,177	0,167	Gamma-glutamyltransferase inhibitor
0,164	0,154	Antineoplastic alkaloid
0,119	0,109	Narcolepsy treatment
0,090	0,080	Monocarboxylic acid transporter inhibitor
0,090	0,080	Monocarboxylic acid transporter 1 inhibitor

0,058	0,048	Malate synthase inhibitor
0,077	0,067	2-Methyleneglutarate mutase inhibitor
0,183	0,173	Antihypertensive
0,078	0,068	5-Oxoprolinase (ATP-hydrolysing) inhibitor
0,074	0,064	Cystathionine beta-lyase inhibitor
0,023	0,014	Alpha galactosidase inhibitor
0,091	0,082	Cholestenone 5alpha-reductase inhibitor
0,125	0,116	Lipoxygenase substrate
0,077	0,068	Threonine ammonia-lyase inhibitor
0,139	0,130	CYP4F2 substrate
0,052	0,043	Hydroxylysine kinase inhibitor
0,056	0,047	Alpha 2 adrenoreceptor agonist
0,010	0,002	Alcohol dehydrogenase alpha inhibitor
0,047	0,039	Delayed rectifier potassium channel blocker
0,079	0,071	2-Dehydro-3-deoxy-L-arabinonate dehydratase inhibitor
0,053	0,045	UGT2B4D substrate
0,053	0,045	UGT2B19 substrate
0,053	0,045	UGT2B4E substrate
0,053	0,045	UGT2B30 substrate
0,053	0,045	UGT2B23 substrate
0,068	0,060	1-Pyrroline-5-carboxylate dehydrogenase inhibitor
0,037	0,029	Tartrate decarboxylase inhibitor
0,027	0,020	I(Ks) voltage-gated potassium channel blocker
0,074	0,066	Nav1.7 sodium channel blocker
0,035	0,028	RNA agonist
0,091	0,084	DNA-3-methyladenine glycosylase II inhibitor
0,128	0,121	Lactate 2-monooxygenase inhibitor
0,042	0,035	D(-)-tartrate dehydratase inhibitor
0,017	0,010	Antiprotozoal activity enhancer
0,053	0,046	1-Alkyl-2-acetylgllycerol O-acyltransferase inhibitor
0,091	0,085	Sulfate adenylyltransferase inhibitor
0,134	0,129	Penicillin amidase inhibitor
0,090	0,084	Glycine receptor antagonist
0,151	0,145	Carnitinamidase inhibitor
0,025	0,020	Histone-lysine N-methyltransferase inhibitor
0,122	0,117	3-Hydroxybenzoate 4-monooxygenase inhibitor
0,124	0,118	Melanin inhibitor

0,222	0,216	Cancer associated disorders treatment
0,033	0,028	Diphosphate-serine phosphotransferase inhibitor
0,060	0,055	3-Dehydroquinase synthase inhibitor
0,163	0,158	Hydroxylamine reductase inhibitor
0,069	0,064	Malate dehydrogenase (NADP+) inhibitor
0,087	0,082	tRNA (cytosine-5-)-methyltransferase inhibitor
0,049	0,044	Androgen agonist
0,069	0,065	2-Oxoaldehyde dehydrogenase (NAD+) inhibitor
0,197	0,193	FMO3 substrate
0,108	0,104	Iron-cytochrome-c reductase inhibitor
0,067	0,063	Aminolevulinate transaminase inhibitor
0,114	0,109	Laminaribiose phosphorylase inhibitor
0,134	0,130	Atrolisin A inhibitor
0,007	0,003	Alcohol dehydrogenase I inhibitor
0,048	0,044	Testosterone agonist
0,039	0,035	Androst-4-ene-3,17-dione monooxygenase inhibitor
0,168	0,164	Acidifying agent non gastric
0,087	0,083	Cholinergic antagonist
0,115	0,111	Granzyme A inhibitor
0,191	0,188	Urethanase inhibitor
0,067	0,063	D-alanine transaminase inhibitor
0,021	0,018	Dopamine D2B antagonist
0,108	0,105	VEGF expression inhibitor
0,068	0,065	Serine-glyoxylate transaminase inhibitor
0,086	0,084	Adenosylmethionine-8-amino-7-oxononanoate transaminase inhibitor
0,012	0,009	Smo receptor agonist
0,129	0,126	3-Demethylubiquinone-9 3-O-methyltransferase inhibitor
0,052	0,049	Prostaglandin-I synthase inhibitor
0,128	0,126	Glucuronate isomerase inhibitor
0,210	0,208	NAD(P)+-arginine ADP-ribosyltransferase inhibitor
0,054	0,052	Asparagine-oxo-acid transaminase inhibitor
0,074	0,071	Scyllo-inosamine-4-phosphate amidinotransferase inhibitor
0,063	0,061	Propanediol dehydratase inhibitor
0,196	0,194	ICAM1 expression inhibitor
0,056	0,054	Thioether S-methyltransferase inhibitor
0,060	0,058	Acetylcholine M3 receptor antagonist
0,071	0,069	Cysteine transaminase inhibitor

0,104	0,102	Membrane dipeptidase inhibitor
0,019	0,018	NMDA receptor phencyclidine site antagonist
0,127	0,126	Antileprosy
0,195	0,194	Antiprotozoal (Coccidial)
0,055	0,054	Acyl-CoA dehydrogenase inhibitor
0,112	0,111	Guanidinoacetate N-methyltransferase inhibitor
0,082	0,081	Acetylcholine antagonist
0,088	0,088	Glucose 1-dehydrogenase inhibitor
0,096	0,096	CYP3C substrate
0,012	0,011	CYP19 inducer
0,052	0,051	ATP diphosphatase inhibitor
0,089	0,088	Cell wall synthesis inhibitor
0,025	0,025	Phosphopyruvate hydratase inhibitor
0,074	0,073	Anthranilate synthase inhibitor
0,104	0,104	Clostripain inhibitor
0,043	0,043	CYP3A11 substrate
0,109	0,109	Catalase inhibitor
0,094	0,094	Coagulant

Complex 2 All

☒ All
 ☐ Pa>Pi
 ☐ Pa>0,3
 ☐ Pa>0,7

Pa	Pi	Activity
0,787	0,003	Vascular endothelial growth factor 3 antagonist
0,793	0,036	Phobic disorders treatment
0,778	0,031	Testosterone 17beta-dehydrogenase (NADP+) inhibitor
0,762	0,018	Nicotinic alpha6beta3beta4alpha5 receptor antagonist
0,758	0,017	Antineoplastic
0,760	0,029	Acrocylindropepsin inhibitor
0,760	0,029	Saccharopepsin inhibitor
0,760	0,029	Chymosin inhibitor
0,720	0,008	Glucan 1,4-alpha-maltotriohydrolase inhibitor
0,706	0,003	Tyrosine-protein kinase receptor FLT3 inhibitor
0,721	0,019	5-O-(4-coumaroyl)-D-quinic acid 3'-monooxygenase inhibitor

0,746	0,049	Aspulvinone dimethylallyltransferase inhibitor
0,711	0,024	Nicotinic alpha2beta2 receptor antagonist
0,680	0,001	Steroid DELTA-isomerase inhibitor
0,696	0,034	Sugar-phosphatase inhibitor
0,683	0,022	Alkylacetylgllycerophosphatase inhibitor
0,689	0,028	Acylcarnitine hydrolase inhibitor
0,662	0,006	Antineoplastic (non-Hodgkin's lymphoma)
0,646	0,030	Ribulose-phosphate 3-epimerase inhibitor
0,663	0,064	CYP2J substrate
0,597	0,006	Imidazoline receptor agonist
0,617	0,031	Glucan endo-1,6-beta-glucosidase inhibitor
0,639	0,056	Polyporopepsin inhibitor
0,592	0,011	Dolichyl-diphosphooligosaccharide-protein glycotransferase inhibitor
0,583	0,005	Platelet aggregation inhibitor
0,653	0,086	Ubiquinol-cytochrome-c reductase inhibitor
0,613	0,050	Glutamyl endopeptidase II inhibitor
0,589	0,033	Feruloyl esterase inhibitor
0,583	0,029	27-Hydroxycholesterol 7alpha-monooxygenase inhibitor
0,595	0,046	Alkenylglycerophosphocholine hydrolase inhibitor
0,604	0,061	CYP2J2 substrate
0,560	0,019	Mannan endo-1,4-beta-mannosidase inhibitor
0,556	0,022	All-trans-retinyl-palmitate hydrolase inhibitor
0,568	0,035	Glucan endo-1,3-beta-D-glucosidase inhibitor
0,550	0,020	CYP2A4 substrate
0,575	0,050	NADPH peroxidase inhibitor
0,570	0,046	Complement factor D inhibitor
0,526	0,005	Antineoplastic (lymphocytic leukemia)
0,572	0,054	Kidney function stimulant
0,546	0,046	Platelet aggregation stimulant
0,509	0,013	Dementia treatment
0,537	0,041	Chloride peroxidase inhibitor
0,486	0,002	4-Carboxymethyl-4-methylbutenolide mutase inhibitor
0,530	0,048	UDP-N-acetylglucosamine 4-epimerase inhibitor
0,522	0,043	Pterin deaminase inhibitor
0,531	0,052	Macrophage colony stimulating factor agonist
0,502	0,027	Glyoxylate reductase inhibitor
0,493	0,019	Albendazole monooxygenase inhibitor

0,498	0,031	Pullulanase inhibitor
0,510	0,044	Fatty-acyl-CoA synthase inhibitor
0,498	0,033	CYP2B5 substrate
0,498	0,038	L-glutamate oxidase inhibitor
0,510	0,052	Limulus clotting factor B inhibitor
0,464	0,011	Imidazoline I1 receptor agonist
0,533	0,086	Phosphatase inhibitor
0,505	0,058	Carboxypeptidase Taq inhibitor
0,475	0,028	Peptidoglycan glycosyltransferase inhibitor
0,533	0,086	Glycosylphosphatidylinositol phospholipase D inhibitor
0,508	0,061	Electron-transferring-flavoprotein dehydrogenase inhibitor
0,488	0,046	Exoribonuclease II inhibitor
0,445	0,010	Endo-1,3(4)-beta-glucanase inhibitor
0,485	0,051	1,4-Lactonase inhibitor
0,508	0,075	Omptin inhibitor
0,433	0,005	Platelet activating factor antagonist
0,496	0,069	Platelet adhesion inhibitor
0,481	0,061	Venombin AB inhibitor
0,423	0,004	Platelet activating factor alpha antagonist
0,450	0,032	Chemosensitizer
0,469	0,051	Hydrogen dehydrogenase inhibitor
0,477	0,060	JAK2 expression inhibitor
0,462	0,046	Gluconate 5-dehydrogenase inhibitor
0,466	0,050	Trimethylamine-oxide aldolase inhibitor
0,442	0,031	Cardiovascular analeptic
0,491	0,080	Acetylcholine neuromuscular blocking agent
0,475	0,064	GST A substrate
0,459	0,051	Cyclic AMP agonist
0,448	0,041	Acetylcholinesterase inhibitor
0,450	0,048	3-Hydroxybenzoate 6-monooxygenase inhibitor
0,438	0,037	Simian immunodeficiency virus proteinase inhibitor
0,463	0,063	Phosphatidylcholine-retinol O-acyltransferase inhibitor
0,471	0,073	Lysase inhibitor
0,490	0,096	Fusarinine-C ornithinesterase inhibitor
0,418	0,025	Xylan endo-1,3-beta-xylosidase inhibitor
0,421	0,028	Cutinase inhibitor
0,392	0,001	Elastase 1 inhibitor

0,394	0,005	Proto-oncogene tyrosine-protein kinase Kit inhibitor
0,412	0,024	Taurine-2-oxoglutarate transaminase inhibitor
0,392	0,005	GST T substrate
0,392	0,005	GST T1-1 substrate
0,435	0,048	Alkenylglycerophosphoethanolamine hydrolase inhibitor
0,409	0,022	Sorbitol-6-phosphate 2-dehydrogenase inhibitor
0,395	0,009	Vascular dementia treatment
0,485	0,100	Pseudolysin inhibitor
0,458	0,074	Thioredoxin inhibitor
0,417	0,036	Arylmalonate decarboxylase inhibitor
0,420	0,039	Aspergillopepsin I inhibitor
0,453	0,072	Alopecia treatment
0,410	0,032	Glucan 1,4-alpha-maltotetraohydrolase inhibitor
0,423	0,048	Acetylgalactosaminyl-O-glycosyl-glycoprotein beta-1,3-N-acetylglucosaminyltransferase inhibitor
0,404	0,032	Poly(beta-D-mannuronate) lyase inhibitor
0,420	0,049	Na ⁺ -transporting two-sector ATPase inhibitor
0,400	0,030	Glycolate dehydrogenase inhibitor
0,393	0,023	CDP-diacylglycerol-glycerol-3-phosphate 3-phosphatidyltransferase inhibitor
0,396	0,027	Shikimate O-hydroxycinnamoyltransferase inhibitor
0,389	0,021	Pediculicide
0,423	0,055	Formaldehyde transketolase inhibitor
0,430	0,064	Fragilysin inhibitor
0,416	0,051	N-acetylneuraminate 7-O(or 9-O)-acetyltransferase inhibitor
0,445	0,081	Antidyskinetic
0,457	0,094	Phthalate 4,5-dioxygenase inhibitor
0,434	0,072	Lysine 2,3-aminomutase inhibitor
0,393	0,033	Antineoplastic (breast cancer)
0,381	0,024	Myeloblastin inhibitor
0,425	0,068	Dehydro-L-gulonate decarboxylase inhibitor
0,445	0,091	Ovulation inhibitor
0,383	0,030	Clavamate synthase inhibitor
0,360	0,007	Alpha-pinene-oxide decyclase inhibitor
0,437	0,090	Phospholipid-translocating ATPase inhibitor
0,408	0,065	CYP2D15 substrate
0,358	0,015	Maltose-transporting ATPase inhibitor
0,410	0,068	CYP2D16 substrate
0,440	0,099	Protein-disulfide reductase (glutathione) inhibitor

0,379	0,039	2-Haloacid dehalogenase inhibitor
0,377	0,038	Undecaprenyldiphospho-muramoylpentapeptide beta-N-acetylglucosaminyltransferase inhibitor
0,388	0,050	Malate oxidase inhibitor
0,437	0,101	CYP2C12 substrate
0,383	0,048	IgA-specific serine endopeptidase inhibitor
0,390	0,056	Cyclohexanone monooxygenase inhibitor
0,404	0,070	Apyrase inhibitor
0,430	0,096	NADPH-cytochrome-c2 reductase inhibitor
0,364	0,031	Yeast ribonuclease inhibitor
0,357	0,024	Sclerosant
0,383	0,051	Limulus clotting factor C inhibitor
0,368	0,036	H ⁺ -exporting ATPase inhibitor
0,374	0,042	Mannose isomerase inhibitor
0,372	0,041	CYP7 inhibitor
0,367	0,037	Fructan beta-fructosidase inhibitor
0,414	0,084	Leukopoiesis stimulant
0,363	0,035	CYP2B11 substrate
0,367	0,038	Cyclomaltodextrinase inhibitor
0,410	0,082	Erythropoiesis stimulant
0,369	0,043	Sulfite oxidase inhibitor
0,350	0,024	Styrene-oxide isomerase inhibitor
0,382	0,058	Mucinaminyserine mucinaminidase inhibitor
0,348	0,025	Phosphoenolpyruvate mutase inhibitor
0,340	0,018	Undecaprenyl-diphosphatase inhibitor
0,393	0,070	Polyamine-transporting ATPase inhibitor
0,353	0,031	Oxidizing agent
0,370	0,048	Nitrite reductase (NO-forming) inhibitor
0,380	0,059	EIF4E expression inhibitor
0,371	0,054	CYP2D2 inhibitor
0,380	0,063	Thymidylate 5'-phosphatase inhibitor
0,405	0,089	Neurotransmitter antagonist
0,345	0,030	D-alanine 2-hydroxymethyltransferase inhibitor
0,374	0,060	GABA aminotransferase inhibitor
0,368	0,054	Steroid N-acetylglucosaminyltransferase inhibitor
0,392	0,079	Arginine 2-monooxygenase inhibitor
0,381	0,068	Phenol O-methyltransferase inhibitor
0,398	0,089	(R)-6-hydroxynicotine oxidase inhibitor

0,320	0,012	Ligase inhibitor
0,361	0,053	Phosphopantothenoylcysteine decarboxylase inhibitor
0,472	0,165	Membrane permeability inhibitor
0,387	0,080	Ecdysone 20-monooxygenase inhibitor
0,389	0,083	CYP2A1 substrate
0,372	0,068	(S)-6-hydroxynicotine oxidase inhibitor
0,373	0,069	Caspase 8 stimulant
0,356	0,052	Chitosanase inhibitor
0,374	0,071	Adenomatous polyposis treatment
0,430	0,127	Membrane integrity agonist
0,344	0,042	Glyoxylate oxidase inhibitor
0,338	0,037	Carminative
0,357	0,056	N-formylmethionyl-peptidase inhibitor
0,385	0,085	Vasoprotector
0,405	0,106	Antiviral (Picornavirus)
0,375	0,077	Cl--transporting ATPase inhibitor
0,383	0,086	4-Nitrophenol 2-monooxygenase inhibitor
0,325	0,028	Licheninase inhibitor
0,344	0,048	Dextranase inhibitor
0,382	0,086	Fibrolase inhibitor
0,401	0,108	Antinociceptive
0,352	0,059	Peptide-N4-(N-acetyl-beta-glucosaminy)asparagine amidase inhibitor
0,371	0,078	Aspartate-phenylpyruvate transaminase inhibitor
0,379	0,086	Dimethylargininase inhibitor
0,320	0,028	Antiparkinsonian, tremor relieving
0,389	0,097	Aminobutyraldehyde dehydrogenase inhibitor
0,318	0,026	Fumarate reductase (NADH) inhibitor
0,329	0,038	CYP2B10 substrate
0,329	0,040	2,3,4,5-Tetrahydropyridine-2,6-dicarboxylate N-succinyltransferase inhibitor
0,378	0,090	Radiosensitizer
0,333	0,045	DELTA14-sterol reductase inhibitor
0,365	0,078	Manganese peroxidase inhibitor
0,337	0,052	Opioid kappa 3 receptor antagonist
0,365	0,081	Pro-opiomelanocortin converting enzyme inhibitor
0,347	0,064	Phosphoinositide 5-phosphatase inhibitor
0,331	0,048	CYP2A2 substrate
0,324	0,042	Quinoprotein glucose dehydrogenase inhibitor

0,365	0,085	Beta-adrenergic receptor kinase inhibitor
0,365	0,085	G-protein-coupled receptor kinase inhibitor
0,340	0,062	Creatininase inhibitor
0,346	0,067	Prostaglandin-A1 DELTA-isomerase inhibitor
0,357	0,079	Centromere associated protein inhibitor
0,309	0,031	Galactolipase inhibitor
0,308	0,031	Alkylglycerone-phosphate synthase inhibitor
0,384	0,107	Cytoprotectant
0,306	0,030	Bisphosphoglycerate mutase inhibitor
0,337	0,062	Lysostaphin inhibitor
0,409	0,134	CYP3A2 substrate
0,351	0,076	Histidine N-acetyltransferase inhibitor
0,423	0,148	Calcium channel (voltage-sensitive) activator
0,320	0,046	Antineoplastic (pancreatic cancer)
0,353	0,080	Glycerol-3-phosphate oxidase inhibitor
0,336	0,062	tRNA-pseudouridine synthase I inhibitor
0,356	0,083	Antimyopathies
0,350	0,079	CYP2A8 substrate
0,309	0,042	GST M substrate
0,303	0,037	Alpha-N-acetylglucosaminidase inhibitor
0,320	0,054	Hematopoietic inhibitor
0,307	0,042	Steroid synthesis inhibitor
0,349	0,084	Membrane permeability enhancer
0,350	0,086	Sphinganine kinase inhibitor
0,308	0,044	Hyaluronic acid agonist
0,332	0,069	RELA expression inhibitor
0,295	0,033	Antineoplastic (small cell lung cancer)
0,302	0,040	Oryzin inhibitor
0,296	0,035	Alkylglycerophosphoethanolamine phosphodiesterase inhibitor
0,355	0,094	Pancreatic elastase inhibitor
0,282	0,022	2-Dehydropantoate aldolase inhibitor
0,327	0,068	Alcohol dehydrogenase (acceptor) inhibitor
0,334	0,076	Leukopoiesis inhibitor
0,293	0,036	Polyneuridine-aldehyde esterase inhibitor
0,338	0,081	Tpr proteinase (Porphyromonas gingivalis) inhibitor
0,283	0,026	Hydroxysteroid dehydrogenase inhibitor
0,326	0,071	Chitinase inhibitor

0,321	0,067	3-Cyanoalanine hydratase inhibitor
0,308	0,057	Hydroxylamine reductase (NADH) inhibitor
0,323	0,072	Antifungal
0,321	0,070	Glutamine-phenylpyruvate transaminase inhibitor
0,346	0,096	Linoleate diol synthase inhibitor
0,291	0,041	N-Acyl-D-aspartate deacylase inhibitor
0,299	0,050	Linoleoyl-CoA desaturase inhibitor
0,330	0,080	Methylamine-glutamate N-methyltransferase inhibitor
0,291	0,043	Protein-Npi-phosphohistidine-sugar phosphotransferase inhibitor
0,360	0,112	Histamine release stimulant
0,382	0,134	5 Hydroxytryptamine uptake stimulant
0,358	0,111	2-Dehydropantoate 2-reductase inhibitor
0,326	0,079	CYP2F1 substrate
0,286	0,040	Poly(alpha-L-guluronate) lyase inhibitor
0,265	0,021	Galacturan 1,4-alpha-galacturonidase inhibitor
0,319	0,075	ADP-thymidine kinase inhibitor
0,335	0,092	Glucose oxidase inhibitor
0,286	0,042	Pseudouridylate synthase inhibitor
0,261	0,019	Deoxyribonuclease I inhibitor
0,319	0,077	Chenodeoxycholytaurine hydrolase inhibitor
0,299	0,058	Glycerol-3-phosphate dehydrogenase inhibitor
0,302	0,061	2-Hydroxymuconate-semialdehyde hydrolase inhibitor
0,268	0,028	Alpha-glucuronidase inhibitor
0,265	0,025	Gamma-butyrobetaine dioxygenase inhibitor
0,342	0,102	Rubredoxin-NAD+ reductase inhibitor
0,342	0,103	Apoptosis agonist
0,319	0,082	Fucoesterol-epoxide lyase inhibitor
0,310	0,073	3-Phytase inhibitor
0,275	0,038	RNA directed DNA polymerase inhibitor
0,282	0,046	Horriylsin inhibitor
0,263	0,028	Tropinesterase inhibitor
0,309	0,076	Adenylyl-sulfate reductase inhibitor
0,305	0,072	Phosphatidylserine decarboxylase inhibitor
0,276	0,044	Dopamine release stimulant
0,277	0,045	Aspergillopepsin II inhibitor
0,304	0,071	N-acylmannosamine kinase inhibitor
0,260	0,029	Cycloartenol synthase inhibitor

0,273	0,042	Rhodotorulapepsin inhibitor
0,334	0,103	Biotinidase inhibitor
0,289	0,059	NF-E2-related factor 2 stimulant
0,278	0,048	Chaperonin ATPase inhibitor
0,257	0,028	Phosphoenolpyruvate-protein phosphotransferase inhibitor
0,297	0,069	Cytostatic
0,258	0,030	Rhizopuspepsin inhibitor
0,282	0,054	Adrenaline release stimulant
0,291	0,064	Long-chain-aldehyde dehydrogenase inhibitor
0,328	0,101	S-formylglutathione hydrolase inhibitor
0,282	0,055	Levanase inhibitor
0,241	0,015	Isoamylase inhibitor
0,299	0,075	D-lactaldehyde dehydrogenase inhibitor
0,316	0,092	Sulfite dehydrogenase inhibitor
0,392	0,168	Antineurotic
0,272	0,049	2-Oxoaldehyde dehydrogenase (NADP+) inhibitor
0,284	0,061	Endothelial growth factor antagonist
0,271	0,048	UGT2B28 substrate
0,267	0,044	Aldosterone antagonist
0,298	0,075	Isopenicillin-N epimerase inhibitor
0,265	0,043	Anthranilate-CoA ligase inhibitor
0,295	0,073	Peptide alpha-N-acetyltransferase inhibitor
0,361	0,140	Thromboxane B2 antagonist
0,280	0,059	Bisphosphoglycerate phosphatase inhibitor
0,280	0,060	Dipeptidase E inhibitor
0,289	0,069	Glutamate-tRNA ligase inhibitor
0,235	0,015	Trehalose-phosphatase inhibitor
0,261	0,042	Vitamin-K-epoxide reductase (warfarin-insensitive) inhibitor
0,282	0,063	CYP2C29 substrate
0,256	0,037	D-xylulose reductase inhibitor
0,348	0,130	Chlordecone reductase inhibitor
0,268	0,050	2-Hydroxy-3-oxoadipate synthase inhibitor
0,250	0,033	1,4-Alpha-glucan branching enzyme inhibitor
0,262	0,045	Mannitol-1-phosphatase inhibitor
0,325	0,108	CYP4A11 substrate
0,307	0,090	Plastoquinol-plastocyanin reductase inhibitor
0,278	0,062	Salicylate 1-monooxygenase inhibitor

0,245	0,029	BRAF expression inhibitor
0,317	0,101	Hydroxylamine oxidase inhibitor
0,298	0,083	Phosphatidylinositol diacylglycerol-lyase inhibitor
0,270	0,056	Benzaldehyde dehydrogenase (NADP+) inhibitor
0,305	0,092	Peptidyl-dipeptidase Dcp inhibitor
0,266	0,053	Flavin-containing monooxygenase inhibitor
0,278	0,066	Transketolase inhibitor
0,230	0,017	Alpha-N-acetylgalactosaminidase inhibitor
0,332	0,120	CYP3A1 substrate
0,275	0,062	Gluconolactonase inhibitor
0,258	0,046	N-acetyllactosaminide beta-1,3-N-acetylglucosaminyltransferase inhibitor
0,278	0,066	NADH kinase inhibitor
0,245	0,034	3-Chloro-D-alanine dehydrochlorinase inhibitor
0,248	0,037	NAD+ synthase (glutamine-hydrolysing) inhibitor
0,262	0,052	Glutarate-semialdehyde dehydrogenase inhibitor
0,338	0,130	Pin1 inhibitor
0,305	0,098	(R)-Pantolactone dehydrogenase (flavin) inhibitor
0,251	0,044	Dynein ATPase inhibitor
0,285	0,081	CYP2A5 substrate
0,251	0,046	Cellulose 1,4-beta-cellobiosidase inhibitor
0,320	0,116	Antiseborrheic
0,245	0,041	Aureolysin inhibitor
0,303	0,099	Cyanoalanine nitrilase inhibitor
0,261	0,057	Lactose synthase inhibitor
0,305	0,102	Leukotriene-C4 synthase inhibitor
0,270	0,068	Cystic fibrosis treatment
0,233	0,030	Alkene monooxygenase inhibitor
0,252	0,051	Prunasin beta-glucosidase inhibitor
0,257	0,057	N-hydroxy-2-acetamidofluorene reductase inhibitor
0,222	0,022	Riboflavin phosphotransferase inhibitor
0,227	0,028	Ferredoxin-NADP+ reductase inhibitor
0,311	0,112	Malate dehydrogenase (acceptor) inhibitor
0,241	0,042	Aryldialkylphosphatase inhibitor
0,264	0,066	Ethanolamine-phosphate cytidyltransferase inhibitor
0,237	0,039	Inulinase inhibitor
0,284	0,086	P-benzoquinone reductase (NADPH) inhibitor
0,338	0,140	Oxygen scavenger

0,251	0,053	Alpha-1,6-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase inhibitor
0,339	0,142	MAP kinase stimulant
0,244	0,049	Polygalacturonase inhibitor
0,251	0,056	Pappalysin-1 inhibitor
0,298	0,103	MMP9 expression inhibitor
0,225	0,030	Glucan 1,6-alpha-glucosidase inhibitor
0,272	0,077	Opioid dependency treatment
0,310	0,116	CYP2C9 inducer
0,245	0,051	3-Methylbutanal reductase inhibitor
0,291	0,097	Antiviral (Adenovirus)
0,235	0,042	Glucan 1,4-beta-glucosidase inhibitor
0,227	0,034	Glycerol-1-phosphatase inhibitor
0,235	0,042	Lactaldehyde reductase inhibitor
0,221	0,028	2,2-Dialkylglycine decarboxylase (pyruvate) inhibitor
0,262	0,070	S-alkylcysteine lyase inhibitor
0,273	0,081	Aspergillus nuclease S1 inhibitor
0,268	0,077	MAP kinase kinase 4 inhibitor
0,236	0,045	Snapalysin inhibitor
0,244	0,053	Glycine dehydrogenase (decarboxylating) inhibitor
0,239	0,049	Cyclooxygenase substrate
0,213	0,024	Estradiol 17alpha-dehydrogenase inhibitor
0,227	0,039	2-Haloacid dehalogenase (configuration-inverting) inhibitor
0,253	0,065	CYP2G1 substrate
0,225	0,037	Aspartate-tRNA ligase inhibitor
0,243	0,056	GABA C receptor agonist
0,276	0,089	DNA-(apurinic or apyrimidinic site) lyase inhibitor
0,250	0,064	Antiperistaltic
0,273	0,088	Antituberculosic
0,218	0,033	Allantoate deiminase inhibitor
0,222	0,037	Bile-salt sulfotransferase inhibitor
0,214	0,030	CYP2B18 substrate
0,251	0,068	Cyclohexyl-isocyanide hydratase inhibitor
0,300	0,117	Endopeptidase So inhibitor
0,276	0,093	Lysyl oxidase inhibitor
0,209	0,027	Carnitine dehydratase inhibitor
0,239	0,057	Crotonoyl-[acyl-carrier-protein] hydratase inhibitor
0,242	0,059	Ornithine cyclodeaminase inhibitor

0,268	0,087	4-Coumarate-CoA ligase inhibitor
0,221	0,041	GABA B receptor agonist
0,287	0,107	Myc inhibitor
0,195	0,015	CYP3A5 inducer
0,244	0,064	N-acetyllactosamine synthase inhibitor
0,212	0,032	L-iduronidase inhibitor
0,238	0,059	N-(long-chain-acyl)ethanolamine deacylase inhibitor
0,216	0,038	Cyclamate sulfohydrolase inhibitor
0,251	0,072	Glutathione dehydrogenase (ascorbate) inhibitor
0,247	0,069	Alanine-tRNA ligase inhibitor
0,269	0,091	Methylumbelliferyl-acetate deacetylase inhibitor
0,209	0,033	Glycopeptide alpha-N-acetylgalactosaminidase inhibitor
0,209	0,033	Glycerone-phosphate O-acyltransferase inhibitor
0,227	0,050	Sedoheptulose-bisphosphatase inhibitor
0,251	0,075	Aspartate-ammonia ligase inhibitor
0,210	0,034	Pectate lyase inhibitor
0,264	0,088	Pyruvate decarboxylase inhibitor
0,276	0,100	CYP3A7 substrate
0,298	0,123	Cytochrome P450 stimulant
0,235	0,060	Procollagen N-endopeptidase inhibitor
0,251	0,077	Transcription factor NF kappa A inhibitor
0,234	0,059	Acyl-CoA oxidase inhibitor
0,265	0,091	N-benzyloxycarbonylglycine hydrolase inhibitor
0,260	0,086	Antiviral (Poxvirus)
0,208	0,035	Antineoplastic (ovarian cancer)
0,209	0,036	Retinyl-palmitate esterase inhibitor
0,210	0,037	Acetylenecarboxylate hydratase inhibitor
0,336	0,163	Octopamine antagonist
0,177	0,005	Cathepsin B inhibitor
0,290	0,119	Antihelmintic (Nematodes)
0,270	0,099	Naphthalene 1,2-dioxygenase inhibitor
0,270	0,099	Ferredoxin-NAD+ reductase inhibitor
0,223	0,052	2,3-Dihydroxyindole 2,3-dioxygenase inhibitor
0,252	0,081	Carbon-monoxide dehydrogenase inhibitor
0,249	0,079	Antiviral (CMV)
0,267	0,097	Para amino benzoic acid antagonist
0,248	0,078	Cholestanetriol 26-monooxygenase inhibitor

0,270	0,101	Antimycobacterial
0,242	0,074	Morphine 6-dehydrogenase inhibitor
0,271	0,104	Enteropeptidase inhibitor
0,183	0,017	Demethylsterigmatocystin 6-O-methyltransferase inhibitor
0,216	0,050	Sterol 3-beta-glucosyltransferase inhibitor
0,284	0,118	NAD(P)+-arginine ADP-ribosyltransferase inhibitor
0,234	0,068	Antipruritic, non-allergic
0,197	0,031	Protein-glucosylgalactosylhydroxylysine glucosidase inhibitor
0,193	0,028	Pectin lyase inhibitor
0,297	0,132	Gonadotropin antagonist
0,223	0,058	D-threo-aldose 1-dehydrogenase inhibitor
0,311	0,147	Antihypoxic
0,327	0,163	Fructose 5-dehydrogenase inhibitor
0,207	0,044	Nitric oxide scavenger
0,195	0,032	Glucuronolactone reductase inhibitor
0,234	0,071	Carboxypeptidase D inhibitor
0,232	0,070	Di-trans,poly-cis-decaprenylcistransferase inhibitor
0,204	0,042	Glutamin-(asparagin-)ase inhibitor
0,187	0,025	(R)-limonene 6-monooxygenase inhibitor
0,241	0,079	Cell wall biosynthesis inhibitor
0,257	0,096	Thiosulfate dehydrogenase inhibitor
0,282	0,122	CYP3A4 inducer
0,196	0,037	Thioredoxin reductase inhibitor
0,256	0,097	Immunostimulant
0,238	0,080	Opheline kinase inhibitor
0,238	0,080	Taurocyamine kinase inhibitor
0,231	0,073	Dimethylmaleate hydratase inhibitor
0,244	0,086	Succinate-semialdehyde dehydrogenase [NAD(P)+] inhibitor
0,201	0,043	Vascular adhesion protein 1 inhibitor
0,282	0,125	Lipoprotein lipase inhibitor
0,218	0,061	Tauropine dehydrogenase inhibitor
0,210	0,054	Leucine dehydrogenase inhibitor
0,285	0,130	Glutathione thiolesterase inhibitor
0,240	0,085	NOS2 expression inhibitor
0,188	0,033	Gaucher disease treatment
0,278	0,124	5 Hydroxytryptamine release stimulant
0,234	0,080	[acyl-carrier-protein] S-acetyltransferase inhibitor

0,272	0,118	CYP3A inducer
0,197	0,043	Dolichyl-phosphatase inhibitor
0,204	0,051	Farnesyltranstransferase inhibitor
0,181	0,028	Dihydrouracil dehydrogenase (NAD+) inhibitor
0,194	0,042	Ganglioside galactosyltransferase inhibitor
0,233	0,080	Prolyl aminopeptidase inhibitor
0,185	0,032	Endo-1,4-beta-xylanase inhibitor
0,261	0,110	Antiprotozoal (Amoeba)
0,222	0,072	Glycerol 2-dehydrogenase (NADP+) inhibitor
0,226	0,076	Gamma-D-Glutamyl-meso-diaminopimelate peptidase inhibitor
0,293	0,143	Caspase 3 stimulant
0,217	0,068	UGT2B17 substrate
0,238	0,089	Thiamine-triphosphatase inhibitor
0,237	0,088	Arylesterase inhibitor
0,205	0,056	Serratia marcescens nuclease inhibitor
0,289	0,140	Nitrate reductase (cytochrome) inhibitor
0,277	0,128	CYP2E1 inducer
0,202	0,053	Arachidonic acid antagonist
0,197	0,049	Trans-pentaprenyltranstransferase inhibitor
0,182	0,034	Deoxyribose-phosphate aldolase inhibitor
0,212	0,064	Peptidyl-dipeptidase B inhibitor
0,265	0,117	Antiviral (Herpes)
0,190	0,042	Saccharolysin inhibitor
0,212	0,064	Guanosine-3',5'-bis(diphosphate) 3'-diphosphatase inhibitor
0,242	0,095	Thiamine pyridinylase inhibitor
0,187	0,039	Protein synthesis stimulant
0,185	0,039	3-Ketovalidoxylamine C-N-lyase inhibitor
0,175	0,028	Choloylglycine hydrolase inhibitor
0,191	0,044	Mannan endo-1,6-alpha-mannosidase inhibitor
0,271	0,124	Bilirubin oxidase inhibitor
0,226	0,081	Meprin B inhibitor
0,170	0,024	Aconitate decarboxylase inhibitor
0,252	0,107	Formate-dihydrofolate ligase inhibitor
0,244	0,099	Aldehyde dehydrogenase (pyrroloquinoline-quinone) inhibitor
0,206	0,061	(S)-3-amino-2-methylpropionate transaminase inhibitor
0,274	0,130	Gamma-guanidinobutyraldehyde dehydrogenase inhibitor
0,189	0,044	Testosterone 17beta-dehydrogenase inhibitor

0,226	0,084	DNA ligase (ATP) inhibitor
0,186	0,044	Polar-amino-acid-transporting ATPase inhibitor
0,173	0,032	Poly(3-hydroxybutyrate) depolymerase inhibitor
0,182	0,041	Allantoinase inhibitor
0,204	0,064	Sweetener
0,230	0,090	Phosphatidylcholine-sterol O-acyltransferase inhibitor
0,168	0,028	Glyceraldehyde-3-phosphate dehydrogenase (phosphorylating) inhibitor
0,177	0,037	Xylose isomerase inhibitor
0,146	0,006	Anesthetic inhalation
0,224	0,085	Glycine amidinotransferase inhibitor
0,254	0,115	Antiinflammatory, intestinal
0,214	0,075	CYP2A3 substrate
0,242	0,103	Leukotriene-B4 20-monooxygenase inhibitor
0,197	0,059	Alpha-amylase inhibitor
0,192	0,054	ADP-ribosylarginine hydrolase inhibitor
0,150	0,012	Fatty-acyl-ethyl-ester synthase inhibitor
0,179	0,041	Pancreatic endopeptidase E inhibitor
0,184	0,046	N-acetylneuraminate synthase inhibitor
0,246	0,108	Methylenetetrahydrofolate reductase (NADPH) inhibitor
0,282	0,144	Amine dehydrogenase inhibitor
0,343	0,206	Mucomembranous protector
0,189	0,053	Laminaribiose phosphorylase inhibitor
0,172	0,036	Glucarate dehydratase inhibitor
0,231	0,095	DNA-3-methyladenine glycosylase I inhibitor
0,250	0,114	4-Hydroxymandelate oxidase inhibitor
0,253	0,117	Nitrite reductase [NAD(P)H] inhibitor
0,175	0,040	Excitatory amino acid transporter EAAC1 inhibitor
0,146	0,011	Imidazoleglycerol-phosphate dehydratase inhibitor
0,175	0,040	Cholesterol oxidase inhibitor
0,197	0,063	4-Chlorobenzoyl-CoA dehalogenase inhibitor
0,165	0,031	Trimethyllysine dioxygenase inhibitor
0,173	0,039	Hepatocyte nuclear factor antagonist
0,173	0,039	Hepatocyte nuclear factor 4 alpha antagonist
0,154	0,020	Deoxycytidine deaminase inhibitor
0,276	0,142	Menopausal disorders treatment
0,179	0,046	Alpha-N-arabinofuranosidase inhibitor
0,237	0,104	Cis-1,2-dihydro-1,2-dihydroxynaphthalene dehydrogenase inhibitor

0,172	0,040	Asparagine-tRNA ligase inhibitor
0,183	0,051	Galactokinase inhibitor
0,250	0,118	Arylsulfate sulfotransferase inhibitor
0,207	0,075	Ubiquitin thiolesterase inhibitor
0,293	0,161	Nicotine dehydrogenase inhibitor
0,174	0,043	N-(5-amino-5-carboxypentanoyl)-L-cysteinyl-D-valine synthase inhibitor
0,146	0,016	Mycodextranase inhibitor
0,265	0,134	Mitochondrial processing peptidase inhibitor
0,193	0,063	Tentoxilysin inhibitor
0,205	0,075	Serine-pyruvate transaminase inhibitor
0,223	0,093	Antiprotozoal (Trichomonas)
0,168	0,039	Antineoplastic (gastric cancer)
0,161	0,031	4-Alpha-glucanotransferase inhibitor
0,191	0,061	Isopenicillin-N synthase inhibitor
0,240	0,111	ICAM1 expression inhibitor
0,162	0,033	(S)-carnitine 3-dehydrogenase inhibitor
0,205	0,076	Antileukemic
0,170	0,041	Acyl-lysine deacylase inhibitor
0,191	0,063	Antirickettsial
0,203	0,077	Cyclopropane-fatty-acyl-phospholipid synthase inhibitor
0,200	0,073	Signal peptidase I inhibitor
0,181	0,055	Ferrochelataase inhibitor
0,167	0,041	Serine 3-dehydrogenase inhibitor
0,141	0,016	Gentamicin 2''-nucleotidyltransferase inhibitor
0,182	0,057	Penicillopepsin inhibitor
0,158	0,033	Creatinase inhibitor
0,188	0,063	Glyoxylate reductase (NADP+) inhibitor
0,188	0,064	Sphinganine-1-phosphate aldolase inhibitor
0,193	0,068	Picornain 3C inhibitor
0,148	0,024	D-proline reductase (dithiol) inhibitor
0,159	0,036	Pregnane X receptor agonist
0,148	0,024	Shab potassium channel blocker
0,151	0,028	Thermomycin inhibitor
0,150	0,027	Succinate dehydrogenase inhibitor
0,181	0,058	Choline-sulfatase inhibitor
0,190	0,067	3-Hydroxy-4-oxoquinoline 2,4-dioxygenase inhibitor
0,216	0,093	Uroporphyrinogen-III synthase inhibitor

0,168	0,047	Valine decarboxylase inhibitor
0,131	0,009	Osmotic diuretic
0,189	0,067	Glutamate 5-kinase inhibitor
0,187	0,066	Acaricide
0,159	0,039	Fructose-2,6-bisphosphate 2-phosphatase inhibitor
0,154	0,034	Antineoplastic, alkylator
0,195	0,075	Threonine aldolase inhibitor
0,183	0,063	N-acetylneuraminate 4-O-acetyltransferase inhibitor
0,141	0,021	Phosphatidylinositol 3-kinase stimulant
0,175	0,055	Galactose oxidase inhibitor
0,218	0,098	Coccolysin inhibitor
0,246	0,126	Alkane 1-monooxygenase inhibitor
0,215	0,096	Oxytocic
0,136	0,018	High-mannose-oligosaccharide beta-1,4-N-acetylglucosaminyltransferase inhibitor
0,151	0,033	Choline dehydrogenase inhibitor
0,206	0,088	Bothrolysin inhibitor
0,162	0,043	Methionine decarboxylase inhibitor
0,175	0,057	3-Carboxyethylcatechol 2,3-dioxygenase inhibitor
0,164	0,046	CDP-diacylglycerol-inositol 3-phosphatidyltransferase inhibitor
0,161	0,043	Glutamate-1-semialdehyde 2,1-aminomutase inhibitor
0,131	0,013	Acetylcholine M3 receptor agonist
0,201	0,083	Diabetic nephropathy treatment
0,182	0,063	IgA-specific metalloendopeptidase inhibitor
0,144	0,026	Beta-amylase inhibitor
0,159	0,041	Carboxymethylenebutenolidase inhibitor
0,209	0,092	Nardilysin inhibitor
0,245	0,128	HMOX1 expression enhancer
0,172	0,056	Methyltransferase substrate
0,146	0,030	2-Dehydropantolactone reductase (A-specific) inhibitor
0,127	0,012	Alpha,alpha-trehalose phosphorylase inhibitor
0,131	0,016	11-Cis-retinyl-palmitate hydrolase inhibitor
0,190	0,075	CYP4A2 substrate
0,283	0,169	RNA-directed RNA polymerase inhibitor
0,170	0,056	Glutamate (mGluR5) agonist
0,194	0,080	2,6-Dihydroxypyridine 3-monooxygenase inhibitor
0,146	0,033	Nicotinamide-nucleotide adenyltransferase inhibitor
0,176	0,063	Vomilenine glucosyltransferase inhibitor

0,148	0,036	D-arabinonolactone oxidase inhibitor
0,133	0,020	Alternansucrase inhibitor
0,233	0,121	RNA synthesis inhibitor
0,191	0,079	Phosphatidylglycerophosphatase inhibitor
0,180	0,068	Mitochondrial intermediate peptidase inhibitor
0,224	0,112	ATP phosphoribosyltransferase inhibitor
0,194	0,082	Antihematotoxic
0,159	0,047	Acetyl-CoA C-acyltransferase inhibitor
0,176	0,065	tRNA nucleotidyltransferase inhibitor
0,142	0,031	Glutamine-pyruvate transaminase inhibitor
0,294	0,184	2-Hydroxyquinoline 8-monooxygenase inhibitor
0,137	0,027	Rhodopsin kinase inhibitor
0,143	0,032	Valine dehydrogenase (NADP+) inhibitor
0,167	0,057	Geranylgeranyl-diphosphate geranylgeranyltransferase inhibitor
0,234	0,124	4-Methoxybenzoate monooxygenase (O-demethylating) inhibitor
0,217	0,108	CYP2C3 substrate
0,187	0,078	UGT2B10 substrate
0,180	0,071	UGT1A5 substrate
0,131	0,023	Homoserine O-succinyltransferase inhibitor
0,134	0,025	Fructuronate reductase inhibitor
0,134	0,025	Tagaturonate reductase inhibitor
0,142	0,034	DELTA24-sterol reductase inhibitor
0,187	0,080	2-Enoate reductase inhibitor
0,149	0,043	Phosphonoacetate hydrolase inhibitor
0,201	0,094	Methanol dehydrogenase inhibitor
0,140	0,033	Glucan 1,3-beta-glucosidase inhibitor
0,177	0,071	Microtubule formation inhibitor
0,200	0,094	Carnitinamidase inhibitor
0,140	0,035	Secretase alpha stimulant
0,140	0,035	Secretase stimulant
0,180	0,074	N-acetyl-gamma-glutamyl-phosphate reductase inhibitor
0,160	0,055	3-Oxadipate enol-lactonase inhibitor
0,140	0,036	Malonate-semialdehyde dehydrogenase inhibitor
0,198	0,094	Hyponitrite reductase inhibitor
0,148	0,044	Glycosylphosphatidylinositol diacylglycerol-lyase inhibitor
0,121	0,017	2-Dehydro-3-deoxy-phosphogluconate aldolase inhibitor
0,123	0,019	Ca ²⁺ -transporting ATPase inhibitor

0,141	0,037	Deoxyribonuclease X inhibitor
0,180	0,076	Rhamnulose-1-phosphate aldolase inhibitor
0,186	0,083	Phenylalanine(histidine) transaminase inhibitor
0,133	0,030	Isomaltulose synthase inhibitor
0,224	0,121	AR expression inhibitor
0,230	0,127	Urethanase inhibitor
0,130	0,027	Ribose-5-phosphate-ammonia ligase inhibitor
0,170	0,067	3'-Nucleotidase inhibitor
0,200	0,097	Bontoxilysin inhibitor
0,268	0,165	Spermidine dehydrogenase inhibitor
0,181	0,079	CYP4F2 substrate
0,177	0,075	2,4-Diaminopentanoate dehydrogenase inhibitor
0,177	0,075	3-Hydroxybutyryl-CoA dehydrogenase inhibitor
0,177	0,075	Lysine 6-dehydrogenase inhibitor
0,168	0,066	Allantoin racemase inhibitor
0,148	0,046	Beta-mannosidase inhibitor
0,129	0,027	Arabinose isomerase inhibitor
0,111	0,010	Phosphatidylinositol 3-kinase beta inhibitor
0,115	0,014	Arabinogalactan endo-1,4-beta-galactosidase inhibitor
0,150	0,049	2-Oxoisovalerate dehydrogenase (acylating) inhibitor
0,229	0,128	Venom exonuclease inhibitor
0,185	0,085	Gallate decarboxylase inhibitor
0,111	0,012	Inositol 1,4,5-triphosphate receptor antagonist
0,139	0,040	Fructose-2,6-bisphosphate 6-phosphatase inhibitor
0,166	0,067	Calcium-sensing receptor agonist
0,167	0,068	Granzyme A inhibitor
0,205	0,107	Eye irritation, inactive
0,208	0,111	Antifibrinolytic
0,283	0,186	Preneoplastic conditions treatment
0,123	0,026	2-Methyleneglutarate mutase inhibitor
0,219	0,123	4-Nitrophenylphosphatase inhibitor
0,160	0,065	Homoserine dehydrogenase inhibitor
0,111	0,015	Alpha,alpha-phosphotrehalase inhibitor
0,215	0,120	Myosin ATPase inhibitor
0,126	0,031	3-Deoxy-8-phosphooctulonate synthase inhibitor
0,147	0,052	D-lactate dehydrogenase inhibitor
0,136	0,040	Cytochrome-c3 hydrogenase inhibitor

0,169	0,073	Protein synthesis inhibitor
0,142	0,047	Lactaldehyde reductase (NADPH) inhibitor
0,152	0,057	Diisopropyl-fluorophosphatase inhibitor
0,138	0,044	Omega-amidase inhibitor
0,142	0,048	CYP19 substrate
0,158	0,064	Cerebroside-sulfatase inhibitor
0,132	0,039	Phosphofructokinase-1 inhibitor
0,132	0,039	Sorbose dehydrogenase inhibitor
0,167	0,074	Lactate 2-monooxygenase inhibitor
0,101	0,008	Glutamate (mGluR3) agonist
0,150	0,057	Glutathione S-transferase substrate
0,193	0,100	Nucleoside oxidase (H2O2-forming) inhibitor
0,166	0,073	Tetrahydroxynaphthalene reductase inhibitor
0,175	0,082	Biotin-CoA ligase inhibitor
0,175	0,082	Triacetate-lactonase inhibitor
0,175	0,082	6-Carboxyhexanoate-CoA ligase inhibitor
0,175	0,082	Homoaconitate hydratase inhibitor
0,158	0,066	Lipotropic
0,177	0,085	Camphor 1,2-monooxygenase inhibitor
0,132	0,040	Gluconate dehydratase inhibitor
0,165	0,073	Pyruvate dehydrogenase (cytochrome) inhibitor
0,165	0,073	Trans-2-enoyl-CoA reductase (NAD+) inhibitor
0,176	0,084	Metallo-carboxypeptidase D inhibitor
0,145	0,054	GABA inverse agonist
0,145	0,054	GABA A inverse agonist
0,182	0,090	Antihypotensive
0,158	0,067	Gly-X carboxypeptidase inhibitor
0,282	0,191	Sulfur reductase inhibitor
0,127	0,036	1,5-Anhydro-D-fructose reductase inhibitor
0,164	0,073	N6-methyl-lysine oxidase inhibitor
0,117	0,027	2-Methylcitrate dehydratase inhibitor
0,194	0,103	Alcohol dehydrogenase [NAD(P)+] inhibitor
0,129	0,039	Glycerophosphocholine cholinephosphodiesterase inhibitor
0,114	0,025	Heme oxygenase inhibitor
0,156	0,067	Melanin inhibitor
0,115	0,026	Inositol-3-phosphate synthase inhibitor
0,093	0,004	Protein phosphatase 2A inhibitor

0,150	0,061	Iron-cytochrome-c reductase inhibitor
0,151	0,062	Cellulase inhibitor
0,119	0,030	Phosphatidylglycerol-membrane-oligosaccharide glycerophosphotransferase inhibitor
0,129	0,040	Aerobactin synthase inhibitor
0,167	0,078	Antineoplastic (renal cancer)
0,137	0,049	2-Aminoacidipate transaminase inhibitor
0,127	0,039	2-Aminoethylphosphonate-pyruvate transaminase inhibitor
0,139	0,051	UDP-N-acetylglucosamine-dolichyl-phosphate N-acetylglucosaminophosphotransferase inhibitor
0,119	0,031	Platelet activating factor beta antagonist
0,151	0,063	Phosphoinositide phospholipase C inhibitor
0,131	0,043	DNA nucleotidylexotransferase inhibitor
0,187	0,100	Retinal dehydrogenase inhibitor
0,121	0,034	Ketohexokinase inhibitor
0,125	0,038	Beta-D-fucosidase inhibitor
0,121	0,034	Glyceraldehyde-3-phosphate dehydrogenase (NADP+) inhibitor
0,165	0,079	Carnosine synthase inhibitor
0,190	0,104	Glutaminase inhibitor
0,117	0,031	Beta-N-acetylgalactosaminidase inhibitor
0,117	0,031	CYP4F substrate
0,120	0,035	Proline dehydrogenase inhibitor
0,115	0,029	L-fuconate dehydratase inhibitor
0,133	0,047	Diacylglycerol kinase inhibitor
0,144	0,059	Allophanate hydrolase inhibitor
0,147	0,062	Valine-tRNA ligase inhibitor
0,132	0,047	Lysozyme inhibitor
0,143	0,058	Prepilin peptidase inhibitor
0,143	0,058	Haloacetate dehalogenase inhibitor
0,152	0,067	UGT2B18 substrate
0,151	0,066	Alpha-Methylacyl-CoA racemase inhibitor
0,143	0,058	Selenocysteine lyase inhibitor
0,107	0,022	Alpha,alpha-trehalose phosphorylase (configuration-retaining) inhibitor
0,201	0,116	CYP2B2 substrate
0,154	0,070	3-Aminobutyryl-CoA ammonia-lyase inhibitor
0,220	0,136	Cytochrome-b5 reductase inhibitor
0,297	0,213	TP53 expression enhancer
0,116	0,032	Ribonuclease U2 inhibitor

0,125	0,041	Homocysteine desulfhydrase inhibitor
0,210	0,126	Cyclic AMP modulator
0,115	0,031	Beta-glucosidase inhibitor
0,243	0,159	CYP3A3 substrate
0,113	0,029	Amino-acid racemase inhibitor
0,228	0,144	Tyrosine 3 hydroxylase inhibitor
0,121	0,037	Bis(5'-adenosyl)-triphosphatase inhibitor
0,120	0,037	2-Hydroxy-3-oxopropionate reductase inhibitor
0,201	0,119	UGT2B4 substrate
0,101	0,018	Chitin deacetylase inhibitor
0,135	0,053	NAD+ kinase inhibitor
0,164	0,082	GST M1-1 substrate
0,129	0,047	1-Aminocyclopropane-1-carboxylate deaminase inhibitor
0,135	0,054	Poly(ADP-ribose) glycohydrolase inhibitor
0,163	0,082	6-Pyruvoyltetrahydropterin synthase inhibitor
0,120	0,038	Dichloromuconate cycloisomerase inhibitor
0,108	0,026	Alpha-L-fucosidase inhibitor
0,137	0,055	Mevalonate kinase inhibitor
0,156	0,076	Phenylacetate-CoA ligase inhibitor
0,116	0,035	3-Oxosteroid 1-dehydrogenase inhibitor
0,154	0,073	SMN2 expression enhancer
0,149	0,068	Aldehyde ferredoxin oxidoreductase inhibitor
0,109	0,029	Alpha-L-rhamnosidase inhibitor
0,181	0,101	Sulfite reductase inhibitor
0,166	0,086	Penicillin amidase inhibitor
0,138	0,058	Urolithiasis treatment
0,163	0,083	4-Hydroxyglutamate transaminase inhibitor
0,173	0,093	Urate-ribonucleotide phosphorylase inhibitor
0,142	0,062	Galactose 1-dehydrogenase (NADP+) inhibitor
0,142	0,062	Beta-alanine-pyruvate transaminase inhibitor
0,116	0,036	N-acetylneuraminate lyase inhibitor
0,154	0,074	2-Acylglycerol O-acyltransferase inhibitor
0,095	0,016	NMDA receptor polyamine site agonist
0,136	0,057	ATP adenylyltransferase inhibitor
0,141	0,062	8-Amino-7-oxononanoate synthase inhibitor
0,136	0,057	CYP26A substrate
0,114	0,035	Gluconokinase inhibitor

0,206	0,128	Indanol dehydrogenase inhibitor
0,137	0,059	Agmatinase inhibitor
0,142	0,064	Thiamine-phosphate kinase inhibitor
0,125	0,047	Glutamate N-acetyltransferase inhibitor
0,103	0,025	(S)-2-Methylmalate dehydratase inhibitor
0,122	0,044	NMDA receptor polyamine site antagonist
0,161	0,083	Creatinine deaminase inhibitor
0,157	0,079	Allyl-alcohol dehydrogenase inhibitor
0,208	0,131	Gingipain K inhibitor
0,263	0,186	Antipruritic, allergic
0,126	0,048	Heparan-alpha-glucosaminide N-acetyltransferase inhibitor
0,127	0,050	Guanidinodeoxy-scylo-inositol-4-phosphatase inhibitor
0,138	0,061	Biotin carboxylase inhibitor
0,190	0,112	Aromatic-hydroxylamine O-acetyltransferase inhibitor
0,141	0,063	Aminocarboxymuconate-semialdehyde decarboxylase inhibitor
0,158	0,081	Lipoxygenase substrate
0,178	0,101	Dihydroxy-acid dehydratase inhibitor
0,169	0,092	Antiprotozoal (Plasmodium)
0,164	0,087	Acetylornithine deacetylase inhibitor
0,174	0,097	Coenzyme-B sulfoethylthiotransferase inhibitor
0,125	0,049	Galactoside 2-alpha-L-fucosyltransferase inhibitor
0,163	0,088	Aldehyde dehydrogenase 2 substrate
0,241	0,166	Retinoic acid metabolism inhibitor
0,159	0,083	2,4-Dichlorophenol 6-monooxygenase inhibitor
0,112	0,037	2-Dehydro-3-deoxy-L-arabinonate dehydratase inhibitor
0,181	0,106	Opine dehydrogenase inhibitor
0,157	0,082	UGT2B9 substrate
0,164	0,090	Glutathione peroxidase inhibitor
0,092	0,018	Alpha-mannosidase inhibitor
0,108	0,034	Squalene-hopene cyclase inhibitor
0,105	0,031	Xylan 1,4-beta-xylosidase inhibitor
0,203	0,130	Gamma-glutamyltransferase inhibitor
0,186	0,112	Histidinol dehydrogenase inhibitor
0,155	0,082	Aspartoacylase inhibitor
0,120	0,047	UDP-glucose 4-epimerase inhibitor
0,123	0,050	Pantothenase inhibitor
0,140	0,067	Phenylpyruvate decarboxylase inhibitor

0,153	0,081	Adenylate cyclase stimulant
0,165	0,092	Antihelmintic (Fasciola)
0,186	0,114	Ferredoxin hydrogenase inhibitor
0,107	0,035	Galactosylgalactosylglucosylceramidase inhibitor
0,114	0,042	Globoside alpha-N-acetylgalactosaminyltransferase inhibitor
0,244	0,172	Superoxide dismutase inhibitor
0,115	0,043	Lysine decarboxylase inhibitor
0,109	0,037	3-Isopropylmalate dehydrogenase inhibitor
0,096	0,024	CYP4F12 substrate
0,121	0,050	Chondroitin 6-sulfotransferase inhibitor
0,134	0,062	O-acetylhomoserine aminocarboxypropyltransferase inhibitor
0,134	0,062	Interferon gamma antagonist
0,136	0,065	Interferon antagonist
0,147	0,076	Aldehyde dehydrogenase (NADP+) inhibitor
0,170	0,099	Indoleacetaldoxime dehydratase inhibitor
0,131	0,060	Isovaleryl-CoA dehydrogenase inhibitor
0,151	0,081	Pyridoxine 4-oxidase inhibitor
0,111	0,041	Cell wall synthesis inhibitor
0,141	0,071	2-Oxoglutarate decarboxylase inhibitor
0,120	0,051	Leucine transaminase inhibitor
0,226	0,156	4-Hydroxyproline epimerase inhibitor
0,252	0,182	N-hydroxyarylamine O-acetyltransferase inhibitor
0,187	0,118	Peroxidase substrate
0,132	0,063	Glucan endo-1,3-alpha-glucosidase inhibitor
0,157	0,088	CDP-4-dehydro-6-deoxyglucose reductase inhibitor
0,122	0,052	UGT2B11 substrate
0,160	0,091	Glycine C-acetyltransferase inhibitor
0,099	0,030	Long-chain-fatty-acid-CoA ligase inhibitor
0,117	0,048	D-glutamate oxidase inhibitor
0,102	0,034	Homospermidine synthase inhibitor
0,097	0,028	Alpha-1,6-mannosyl-glycoprotein 6-beta-N-acetylglucosaminyltransferase inhibitor
0,129	0,061	NAD(P)+ transhydrogenase (B-specific) inhibitor
0,128	0,060	Neurotrophin inhibitor
0,160	0,092	Stromelysin 2 inhibitor
0,158	0,091	Hydroxymethylglutaryl-CoA lyase inhibitor
0,160	0,092	Arylacetonitrilase inhibitor
0,159	0,092	Dolichol kinase inhibitor

0,072	0,005	Antimitotic, Podophyllotoxin-like
0,285	0,218	Taurine dehydrogenase inhibitor
0,101	0,035	[hydroxymethylglutaryl-CoA reductase (NADPH)] kinase inhibitor
0,139	0,072	CYP4B substrate
0,124	0,058	L-lysine 6-transaminase inhibitor
0,221	0,154	Analgesic stimulant
0,087	0,020	3-Alpha-hydroxysteroid dehydrogenase (B-specific) inhibitor
0,198	0,132	Cathepsin T inhibitor
0,131	0,065	(S)-2-hydroxy-acid oxidase inhibitor
0,128	0,062	Iduronate-2-sulfatase inhibitor
0,124	0,058	Glycoprotein 3-alpha-L-fucosyltransferase inhibitor
0,098	0,033	6-Phosphofructo-2-kinase inhibitor
0,126	0,060	D-2-hydroxy-acid dehydrogenase inhibitor
0,179	0,114	Indolepyruvate C-methyltransferase inhibitor
0,171	0,106	Mucolytic
0,147	0,082	Aminopeptidase Y inhibitor
0,127	0,063	N4-(beta-N-acetylglucosaminy)-L-asparaginase inhibitor
0,235	0,171	Loop diuretic
0,104	0,039	Phosphoenolpyruvate carboxykinase (diphosphate) inhibitor
0,156	0,092	CYP2D1 substrate
0,134	0,070	Antineoplastic (cervical cancer)
0,106	0,042	Monocarboxylic acid transporter 1 inhibitor
0,106	0,042	Monocarboxylic acid transporter inhibitor
0,083	0,020	ATP diphosphatase inhibitor
0,146	0,083	Plasmanylethanolamine desaturase inhibitor
0,197	0,134	Methane monooxygenase inhibitor
0,147	0,084	Tryptophan transaminase inhibitor
0,128	0,066	Antineoplastic (uterine cancer)
0,070	0,007	CYP4F8 substrate
0,144	0,081	Glucosyl transferase inhibitor
0,077	0,014	Sucrose-phosphate phosphatase inhibitor
0,105	0,042	Cysteine transaminase inhibitor
0,198	0,135	Sigma receptor agonist
0,139	0,077	Antibacterial, ophthalmic
0,091	0,028	CYP2A13 substrate
0,155	0,093	Inorganic diphosphatase inhibitor
0,139	0,077	Chitin synthase inhibitor

0,094	0,032	3-Oxoacyl-[acyl-carrier-protein] synthase inhibitor
0,115	0,053	Aspartate-ammonia ligase (ADP-forming) inhibitor
0,247	0,185	Antiinflammatory, ophthalmic
0,129	0,068	Pantoate 4-dehydrogenase inhibitor
0,152	0,091	N-methyl-2-oxoglutaramate hydrolase inhibitor
0,140	0,079	Adenylate kinase inhibitor
0,120	0,059	L-galactonolactone oxidase inhibitor
0,093	0,032	Amylo-alpha-1,6-glucosidase inhibitor
0,122	0,061	D-lactate dehydrogenase (cytochrome) inhibitor
0,099	0,038	(R)-aminopropanol dehydrogenase inhibitor
0,150	0,090	L-glucuronate reductase inhibitor
0,130	0,070	CYP4B1 substrate
0,088	0,028	Peptidoglycan beta-N-acetylmuramidase inhibitor
0,185	0,126	Tankyrase inhibitor
0,098	0,039	Malate dehydrogenase (NADP+) inhibitor
0,128	0,069	Pyruvate dehydrogenase inhibitor
0,090	0,031	4a-Hydroxytetrahydrobiopterin dehydratase inhibitor
0,109	0,050	Leucine-tRNA ligase inhibitor
0,149	0,090	Polynucleotide 5'-hydroxy-kinase inhibitor
0,140	0,081	Peptidylamidoglycolate lyase inhibitor
0,125	0,066	Carnitine 3-dehydrogenase inhibitor
0,148	0,089	Cytochrome-b5 reductase substrate
0,101	0,043	Retinol O-fatty-acyltransferase inhibitor
0,095	0,036	Epoxide hydrolase substrate
0,101	0,042	Cellobiose phosphorylase inhibitor
0,138	0,080	Methylaspartate ammonia-lyase inhibitor
0,111	0,052	Adenylylsulphatase inhibitor
0,081	0,022	1-Alkyl-2-acetyl glycerol O-acyltransferase inhibitor
0,223	0,165	Antiviral (Influenza)
0,189	0,131	Acetylserotonin O-methyltransferase inhibitor
0,086	0,029	Aldose 1-epimerase inhibitor
0,136	0,079	HIV-2 reverse transcriptase inhibitor
0,089	0,032	Steroid sulfotransferase inhibitor
0,118	0,060	Ribonuclease inhibitor
0,118	0,061	Aldehyde dehydrogenase [NAD(P)+] inhibitor
0,187	0,130	1-Alkylglycerophosphocholine O-acetyltransferase inhibitor
0,112	0,055	Aspartate transaminase inhibitor

0,097	0,040	Argininosuccinate lyase inhibitor
0,147	0,090	Benzoylformate decarboxylase inhibitor
0,097	0,040	Ribulose-bisphosphate carboxylase inhibitor
0,187	0,130	Antibacterial
0,116	0,059	Cholate-CoA ligase inhibitor
0,145	0,088	Brachyurin inhibitor
0,115	0,059	Pyrimidine-deoxynucleoside 2'-dioxygenase inhibitor
0,103	0,046	UDP-N-acetylglucosamine diphosphorylase inhibitor
0,195	0,139	X-methyl-His dipeptidase inhibitor
0,193	0,137	Acidifying agent non gastric
0,102	0,046	5-Oxoprolinase (ATP-hydrolysing) inhibitor
0,155	0,099	3-Demethylubiquinone-9 3-O-methyltransferase inhibitor
0,119	0,063	Diacylglycerol cholinephosphotransferase inhibitor
0,119	0,063	NADH dehydrogenase inhibitor
0,146	0,090	Acetate kinase inhibitor
0,130	0,075	Ethanolaminephosphotransferase inhibitor
0,078	0,023	Mannosidase inhibitor
0,088	0,033	Aspartate 1-decarboxylase inhibitor
0,139	0,084	Oligopeptidase B inhibitor
0,072	0,017	Phosphatidylinositol 3-kinase alpha inhibitor
0,096	0,042	L-lysine oxidase inhibitor
0,071	0,017	Biotin-[methylmalonyl-CoA-carboxytransferase] ligase inhibitor
0,121	0,067	Sulfate adenylyltransferase (ADP) inhibitor
0,187	0,133	Prostaglandin-E2 9-reductase inhibitor
0,087	0,033	Lactate-malate transhydrogenase inhibitor
0,105	0,051	Inositol-polyphosphate 5-phosphatase inhibitor
0,169	0,116	Aminomuconate-semialdehyde dehydrogenase inhibitor
0,198	0,145	Chloride channel activator
0,107	0,053	Dihydrouracil oxidase inhibitor
0,086	0,033	3-Dehydroquinase synthase inhibitor
0,115	0,062	Alkanal monooxygenase (FMN-linked) inhibitor
0,086	0,033	mRNA (guanine-N7-)-methyltransferase inhibitor
0,122	0,069	Glycogen (starch) synthase inhibitor
0,155	0,103	Guanidinoacetate kinase inhibitor
0,124	0,072	Skin whitener
0,070	0,017	Prostaglandin-I synthase inhibitor
0,267	0,215	Intermittent claudication treatment

0,073	0,021	Glucan 1,4-alpha-glucosidase inhibitor
0,190	0,138	Glutaminyl-peptide cyclotransferase inhibitor
0,095	0,044	Phenylalanine-tRNA ligase inhibitor
0,106	0,055	Acyloxyacyl hydrolase inhibitor
0,116	0,066	Anabolic
0,088	0,038	Glutaminyl-tRNA synthase (glutamine-hydrolysing) inhibitor
0,085	0,035	CYP2C2 substrate
0,070	0,020	Amylosucrase inhibitor
0,098	0,049	Galactosylceramide sulfotransferase inhibitor
0,116	0,067	Cysteine desulfurase inhibitor
0,106	0,056	tRNA (cytosine-5-)-methyltransferase inhibitor
0,101	0,051	Benzaldehyde dehydrogenase (NAD+) inhibitor
0,143	0,094	Hydroxymethylbilane synthase inhibitor
0,199	0,150	CYP2C6 substrate
0,108	0,060	Allantoicase inhibitor
0,119	0,070	Beta lactamase inhibitor
0,112	0,064	Glycerol-3-phosphate O-acyltransferase inhibitor
0,091	0,043	2-Methylcitrate synthase inhibitor
0,109	0,061	DNA-3-methyladenine glycosylase II inhibitor
0,124	0,076	Aryl-alcohol dehydrogenase inhibitor
0,098	0,050	Deoxyribonuclease (pyrimidine dimer) inhibitor
0,081	0,033	Carnitine O-octanoyltransferase inhibitor
0,127	0,079	Sulfur dioxygenase inhibitor
0,077	0,029	Beta galactosidase inhibitor
0,202	0,154	NADPH-ferrihemoprotein reductase inhibitor
0,058	0,010	Sucrose phosphorylase inhibitor
0,102	0,054	Mannonate dehydratase inhibitor
0,095	0,047	Saccharopine dehydrogenase (NAD+, L-glutamate-forming) inhibitor
0,070	0,022	UGT2B4E substrate
0,070	0,022	UGT2B30 substrate
0,070	0,022	UGT2B19 substrate
0,070	0,022	UGT2B23 substrate
0,070	0,022	UGT2B4D substrate
0,114	0,067	Aspartate kinase inhibitor
0,134	0,086	(R,R)-butanediol dehydrogenase inhibitor
0,192	0,145	Antineoplastic (brain cancer)
0,208	0,160	FMO1 substrate

0,126	0,078	Protein-tyrosine sulfotransferase inhibitor
0,083	0,035	Pyruvate, phosphate dikinase inhibitor
0,115	0,068	5 Hydroxytryptamine 4A antagonist
0,078	0,032	[acetyl-CoA carboxylase] kinase inhibitor
0,070	0,023	Glucan 1,3-alpha-glucosidase inhibitor
0,136	0,089	Glutamate synthase (ferredoxin) inhibitor
0,191	0,144	Trimethylamine dehydrogenase inhibitor
0,072	0,025	D-lactate-2-sulfatase inhibitor
0,171	0,124	Pitrilysin inhibitor
0,135	0,089	N-Acyl-D-amino-acid deacylase inhibitor
0,185	0,139	L-threonine 3-dehydrogenase inhibitor
0,137	0,091	3,4-Dihydroxy-9,10-secoandrosta-1,3,5(10)-triene-9,17-dione 4,5-dioxygenase inhibitor
0,084	0,038	4-Hydroxy-4-methyl-2-oxoglutarate aldolase inhibitor
0,064	0,018	D(-)-tartrate dehydratase inhibitor
0,086	0,041	Glycerophosphocholine phosphodiesterase inhibitor
0,082	0,037	3(or 17)alpha-hydroxysteroid dehydrogenase inhibitor
0,080	0,035	Lactaldehyde dehydrogenase inhibitor
0,143	0,099	Tyrosine kinase stimulant
0,114	0,070	CYP19 inhibitor
0,087	0,043	Aspartate-semialdehyde dehydrogenase inhibitor
0,072	0,029	Acidifying agent gastric
0,127	0,084	Cysteine synthase inhibitor
0,071	0,028	CYP24 inhibitor
0,136	0,093	(S)-3-hydroxyacid ester dehydrogenase inhibitor
0,239	0,196	CYP19A1 expression inhibitor
0,129	0,086	Candidapepsin inhibitor
0,090	0,047	2-Oxoaldehyde dehydrogenase (NAD+) inhibitor
0,084	0,041	ATP deaminase inhibitor
0,092	0,049	Scyllo-inosamine-4-phosphate amidinotransferase inhibitor
0,205	0,162	3C-like protease (Human coronavirus) inhibitor
0,088	0,046	Deoxycytidine kinase inhibitor
0,110	0,068	Glucose 1-dehydrogenase inhibitor
0,085	0,043	Polyamine biosynthesis inhibitor
0,085	0,044	Cyanate hydratase inhibitor
0,067	0,025	3'(2'),5'-Bisphosphate nucleotidase inhibitor
0,066	0,025	Aromatase inhibitor
0,151	0,110	Cyclopentanone monooxygenase inhibitor

0,103	0,062	Phosphatidate cytidyltransferase inhibitor
0,124	0,083	Endoglycosylceramidase inhibitor
0,093	0,053	UDP-N-acetylglucosamine 2-epimerase inhibitor
0,106	0,065	Site-specific DNA-methyltransferase (adenine-specific) inhibitor
0,068	0,028	D-Serine ammonia-lyase inhibitor
0,055	0,015	Tartrate decarboxylase inhibitor
0,253	0,213	Oxidoreductase inhibitor
0,086	0,046	Alpha,alpha-trehalose-phosphate synthase (UDP-forming) inhibitor
0,101	0,062	Ribitol 2-dehydrogenase inhibitor
0,105	0,067	Adenosylmethionine-8-amino-7-oxononanoate transaminase inhibitor
0,044	0,005	Progesterone receptor B antagonist
0,098	0,059	Thiamine-phosphate diphosphorylase inhibitor
0,097	0,058	Glycerol dehydratase inhibitor
0,156	0,117	Thermitase inhibitor
0,090	0,051	CYP26 substrate
0,094	0,056	Acetoacetate decarboxylase inhibitor
0,099	0,061	Cytosole dipeptidase inhibitor
0,071	0,033	Corticotropin releasing factor antagonist
0,208	0,170	Antiprotozoal (Coccidial)
0,175	0,137	Antiprotozoal
0,128	0,090	Tryptophanyl aminopeptidase inhibitor
0,142	0,104	4-Chlorophenylacetate 3,4-dioxygenase inhibitor
0,168	0,130	Diamine N-acetyltransferase inhibitor
0,126	0,088	3-Hydroxyphenylacetate 6-hydroxylase inhibitor
0,135	0,097	Pyruvate carboxylase inhibitor
0,122	0,084	Acylglycerone-phosphate reductase inhibitor
0,061	0,023	CYP17 substrate
0,061	0,024	Na ⁺ K ⁺ transporting ATPase inhibitor
0,134	0,097	4-Hydroxybenzoate nonaprenyltransferase inhibitor
0,174	0,137	O-aminophenol oxidase inhibitor
0,089	0,053	Necroptosis inhibitor
0,121	0,084	Gingipain R inhibitor
0,074	0,037	Glutathione reductase stimulant
0,074	0,037	Glutathione reductase (NADPH) stimulant
0,121	0,084	Galactoside O-acetyltransferase inhibitor
0,119	0,084	Arylalkyl acylamidase inhibitor
0,107	0,071	Aspartyl aminopeptidase inhibitor

0,150	0,114	Ferredoxin-nitrite reductase inhibitor
0,103	0,068	Alanine transaminase inhibitor
0,103	0,068	Malyl-CoA lyase inhibitor
0,100	0,065	Glycerol-3-phosphate dehydrogenase (NAD+) inhibitor
0,101	0,065	Glycoprotein-fucosylgalactoside alpha-N-acetylgalactosaminyltransferase inhibitor
0,065	0,030	Hydroxylysine kinase inhibitor
0,096	0,062	Alpha, alpha-trehalase inhibitor
0,081	0,046	Phosphoribulokinase inhibitor
0,257	0,223	Mannotetraose 2-alpha-N-acetylglucosaminyltransferase inhibitor
0,105	0,070	Squalene epoxidase inhibitor
0,133	0,098	Heat shock protein agonist
0,061	0,027	Propionate CoA-transferase inhibitor
0,073	0,039	Dextranucrase inhibitor
0,197	0,163	DNA synthesis inhibitor
0,073	0,039	Deoxyhypusine synthase inhibitor
0,070	0,036	Malate synthase inhibitor
0,079	0,045	3-Dehydroquinate dehydratase inhibitor
0,112	0,078	Narcotic antagonist
0,231	0,198	Polarisation stimulant
0,077	0,044	N-acetylglucosaminyldiphosphoundecaprenol N-acetyl-beta-D-mannosaminyltransferase inhibitor
0,087	0,054	Guanidinopropionase inhibitor
0,166	0,133	Severe acute respiratory syndrome treatment
0,047	0,014	Thymidine phosphorylase inhibitor
0,078	0,045	Dihydrolipoamide S-acetyltransferase inhibitor
0,063	0,031	CMP-KDO synthase inhibitor
0,077	0,044	Hydroperoxide dehydratase inhibitor
0,096	0,064	Isocitrate dehydrogenase (NAD+) inhibitor
0,035	0,003	3-Oxoacyl-[acyl-carrier-protein] synthase II inhibitor
0,251	0,219	Insulin promoter
0,062	0,030	Biotin-[propionyl-CoA-carboxylase (ATP-hydrolysing)] ligase inhibitor
0,097	0,065	Malate dehydrogenase (oxaloacetate-decarboxylating) inhibitor
0,154	0,123	Nicotinic alpha4beta2 receptor antagonist
0,099	0,067	Tyrosine-protein kinase TYRO 10 inhibitor
0,098	0,066	Glutamate (mGluR6) antagonist
0,210	0,178	Pyroglutamyl-peptidase II inhibitor
0,081	0,050	S-methyl-5-thioribose kinase inhibitor
0,213	0,182	Membrane integrity antagonist

0,074	0,042	Glycerol kinase inhibitor
0,125	0,094	Procollagen C-endopeptidase inhibitor
0,116	0,085	Cathepsin H inhibitor
0,102	0,071	Cerevisin inhibitor
0,133	0,103	Tryptophan alpha,beta-oxidase inhibitor
0,062	0,031	Glycine N-choloyltransferase inhibitor
0,107	0,077	CYP3C substrate
0,075	0,044	L-aminoadipate-semialdehyde dehydrogenase inhibitor
0,109	0,079	Glucosamine-6-phosphate deaminase inhibitor
0,105	0,074	Decylcitrate synthase inhibitor
0,065	0,035	Alpha-1,6-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase inhibitor
0,063	0,033	Deoxyadenosine kinase inhibitor
0,079	0,050	N-acetylglucosamine-6-phosphate deacetylase inhibitor
0,100	0,070	D-Ornithine 4,5-aminomutase inhibitor
0,128	0,099	Lombricine kinase inhibitor
0,101	0,071	Diiodophenylpyruvate reductase inhibitor
0,136	0,107	Tryptophan dimethylallyltransferase inhibitor
0,050	0,021	Methylaspartate mutase inhibitor
0,072	0,043	UGT2B7H substrate
0,072	0,043	UGT2B7Y substrate
0,155	0,126	Sodium channel blocker class Ib
0,190	0,161	Monoamine uptake inhibitor
0,191	0,162	4-Hydroxyphenylacetate 3-monooxygenase inhibitor
0,082	0,054	Neolactotetraosylceramide alpha-2,3-sialyltransferase inhibitor
0,127	0,098	Peptide-tryptophan 2,3-dioxygenase inhibitor
0,114	0,086	3-Isopropylmalate dehydratase inhibitor
0,073	0,045	Glutamate (mGluR8) agonist
0,042	0,014	Homoisocitrate dehydrogenase inhibitor
0,082	0,054	Oligo-1,6-glucosidase inhibitor
0,089	0,061	CTP synthase inhibitor
0,103	0,075	D-cysteine desulfhydrase inhibitor
0,060	0,032	Sucrose alpha-glucosidase inhibitor
0,091	0,062	Astringent
0,049	0,021	Orotidylate decarboxylase inhibitor
0,103	0,075	Glucosamine-1-phosphate N-acetyltransferase inhibitor
0,074	0,047	Serine-tRNA ligase inhibitor
0,161	0,134	Corticosteroid side-chain-isomerase inhibitor

0,088	0,060	D-malate dehydrogenase (decarboxylating) inhibitor
0,066	0,039	Quinate 5-dehydrogenase inhibitor
0,070	0,043	3-Hydroxydecanoyl-[acyl-carrier-protein] dehydratase inhibitor
0,058	0,031	CYP24 substrate
0,067	0,040	GMP synthase inhibitor
0,082	0,056	Succinate-hydroxymethylglutarate CoA-transferase inhibitor
0,118	0,092	Homogentisate 1,2-dioxygenase inhibitor
0,040	0,014	Transaldolase inhibitor
0,070	0,043	Formimidoylglutamase inhibitor
0,132	0,105	Restless leg syndrome treatment
0,066	0,039	Thioether S-methyltransferase inhibitor
0,168	0,142	N-methylhydantoinase (ATP-hydrolysing) inhibitor
0,109	0,083	Phenylacetaldehyde dehydrogenase inhibitor
0,066	0,040	Phosphoglucomutase inhibitor
0,112	0,086	Acylphosphatase inhibitor
0,119	0,093	Succinic dehydrogenase inhibitor
0,065	0,039	Oxaloacetate tautomerase inhibitor
0,093	0,067	Formaldehyde dehydrogenase inhibitor
0,053	0,027	CYP3A11 substrate
0,058	0,033	Uracil phosphoribosyltransferase inhibitor
0,048	0,022	Androst-4-ene-3,17-dione monooxygenase inhibitor
0,140	0,114	Choline kinase inhibitor
0,071	0,046	Isocitrate dehydrogenase (NADP+) inhibitor
0,075	0,050	Maleate hydratase inhibitor
0,098	0,073	Sarcosine oxidase inhibitor
0,039	0,013	Uridine phosphorylase inhibitor
0,046	0,021	Isopentenyl-diphosphate DELTA-isomerase inhibitor
0,103	0,078	Asparaginase inhibitor
0,050	0,025	NADPH oxidoreductase inhibitor
0,075	0,050	ACK1 kinase inhibitor
0,084	0,059	CMP-N-acylneuraminate phosphodiesterase inhibitor
0,099	0,075	Aspartate racemase inhibitor
0,123	0,099	Narcolepsy treatment
0,081	0,057	Muconate cycloisomerase inhibitor
0,097	0,074	2-Nitrophenol 2-monooxygenase inhibitor
0,077	0,054	D-alanine transaminase inhibitor
0,104	0,081	Acetolactate decarboxylase inhibitor

0,083	0,061	Diguanidinobutanase inhibitor
0,090	0,068	Vascular endothelial growth factor antagonist
0,057	0,035	Aspartate ammonia-lyase inhibitor
0,102	0,080	Dethiobiotin synthase inhibitor
0,115	0,092	FMN reductase inhibitor
0,068	0,046	L-lactate dehydrogenase (cytochrome) inhibitor
0,067	0,044	UDP-glucose 6-dehydrogenase inhibitor
0,070	0,047	Nicotinic receptor alpha7 subunit antagonist
0,088	0,066	CYP2B4 substrate
0,080	0,058	tRNA (guanine-N2-)-methyltransferase inhibitor
0,103	0,081	Pyruvate dehydrogenase (lipoamide) inhibitor
0,101	0,080	Serine-phosphoethanolamine synthase inhibitor
0,079	0,058	SULT2A1 substrate
0,152	0,131	Expectorant
0,089	0,069	Orotate reductase (NADPH) inhibitor
0,185	0,165	Monodehydroascorbate reductase (NADH) inhibitor
0,109	0,089	Thiol S-methyltransferase inhibitor
0,043	0,022	Dichloromethane dehalogenase inhibitor
0,171	0,150	TRPA1 agonist
0,128	0,108	Glycerol dehydrogenase (NADP+) inhibitor
0,191	0,171	Immunomodulator
0,151	0,131	Gastrointestinal motility stimulant
0,086	0,067	Capillary fragility treatment
0,143	0,124	Laxative
0,053	0,033	AMP nucleosidase inhibitor
0,079	0,059	Cystathionine beta-lyase inhibitor
0,152	0,133	Histone acetyltransferase inhibitor
0,049	0,029	N-acetylglucosaminylidiphosphodolichol N-acetylglucosaminyltransferase inhibitor
0,135	0,115	Arylamine N-acetyltransferase inhibitor
0,074	0,055	Alpha glucosidase inhibitor
0,096	0,077	Aryl-aldehyde dehydrogenase (NADP+) inhibitor
0,039	0,020	Membrane-oligosaccharide glycerophosphotransferase inhibitor
0,252	0,234	Mucositis treatment
0,084	0,066	Diaminopropionate ammonia-lyase inhibitor
0,131	0,113	Quisqualate antagonist
0,159	0,141	Renal tissue kallikrein inhibitor
0,041	0,023	Phosphoglycerate phosphatase inhibitor

0,077	0,059	[myelin basic protein]-arginine N-methyltransferase inhibitor
0,063	0,045	Beta-1,4-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase inhibitor
0,058	0,040	Plus-end-directed kinesin ATPase inhibitor
0,050	0,033	Anhydrotetracycline monooxygenase inhibitor
0,183	0,166	Calcium channel activator
0,045	0,028	Thymidine-triphosphatase inhibitor
0,057	0,040	Carbamoyl-serine ammonia-lyase inhibitor
0,092	0,075	Ornithine-oxo-acid transaminase inhibitor
0,158	0,142	Ribonucleoside triphosphate reductase inhibitor
0,073	0,056	Urocanate hydratase inhibitor
0,025	0,008	Progesterone receptor B1 antagonist
0,062	0,046	UDP-N-acetylmuramoylalanine-D-glutamate ligase inhibitor
0,097	0,081	Adenine deaminase inhibitor
0,122	0,106	Corticosteroid antagonist
0,076	0,060	Cushing's syndrome treatment
0,072	0,056	Carbamoyl-phosphate synthase (ammonia) inhibitor
0,070	0,054	Propanediol dehydratase inhibitor
0,119	0,103	Guanidinoacetate N-methyltransferase inhibitor
0,091	0,075	CMP-N-acetylneuraminate monooxygenase inhibitor
0,077	0,062	Guanylate kinase inhibitor
0,112	0,097	Cancer procoagulant inhibitor
0,104	0,089	Malate-CoA ligase inhibitor
0,060	0,045	Methylthioadenosine nucleosidase inhibitor
0,037	0,022	Glucose-6-phosphate isomerase inhibitor
0,104	0,090	Lysine 2-monooxygenase inhibitor
0,088	0,073	Triose-phosphate isomerase inhibitor
0,178	0,163	Antiparkinsonian, rigidity relieving
0,169	0,155	Dactylisin inhibitor
0,081	0,067	UDP-N-acetylglucosamine 1-carboxyvinyltransferase inhibitor
0,178	0,164	Antitoxic
0,156	0,141	D-amino-acid dehydrogenase inhibitor
0,053	0,039	Glutamate (mGluR1) agonist
0,030	0,016	Alpha glucosidase I inhibitor
0,126	0,112	Tryptophanamidase inhibitor
0,038	0,024	Endo-beta-N-acetylglucosaminidase inhibitor
0,064	0,051	4-Hydroxy-2-oxoglutarate aldolase inhibitor
0,058	0,045	Androgen antagonist

0,103	0,089	Cysteine-S-conjugate beta-lyase inhibitor
0,114	0,101	Isoquinoline 1-oxidoreductase inhibitor
0,080	0,066	Haloalkane dehalogenase inhibitor
0,128	0,115	Acetylspermidine deacetylase inhibitor
0,076	0,064	Carboxylate reductase inhibitor
0,100	0,087	Arginine deiminase inhibitor
0,059	0,047	Asparagine-oxo-acid transaminase inhibitor
0,224	0,212	Cancer associated disorders treatment
0,043	0,031	2-Ethylmalate synthase inhibitor
0,030	0,018	Phosphopyruvate hydratase inhibitor
0,094	0,082	Sulfate adenylyltransferase inhibitor
0,066	0,054	Cellulose synthase (UDP-forming) inhibitor
0,096	0,084	Photinus-luciferin 4-monooxygenase (ATP-hydrolysing) inhibitor
0,086	0,074	Agaritine gamma-glutamyltransferase inhibitor
0,078	0,067	Threonine ammonia-lyase inhibitor
0,092	0,081	Putrescine oxidase inhibitor
0,075	0,064	Gastricsin inhibitor
0,094	0,083	Xanthommatin reductase inhibitor
0,087	0,076	Streptopain inhibitor
0,048	0,037	Nucleoside deoxyribosyltransferase inhibitor
0,080	0,069	Nucleotide diphosphatase inhibitor
0,195	0,184	Aldehyde oxidase inhibitor
0,116	0,105	Dolichyl-phosphate beta-D-mannosyltransferase inhibitor
0,024	0,013	Dopamine D2B antagonist
0,054	0,044	Malate dehydrogenase (decarboxylating) inhibitor
0,100	0,090	Venombin A inhibitor
0,055	0,045	1-Phosphofructokinase inhibitor
0,053	0,043	Assemblin inhibitor
0,117	0,107	Phenylalanine racemase (ATP-hydrolysing) inhibitor
0,110	0,100	Polyamine oxidase inhibitor
0,052	0,043	Protein N-acetylglucosaminyltransferase inhibitor
0,051	0,042	Aldehyde dehydrogenase 1A2 inhibitor
0,127	0,118	UGT2B7 substrate
0,106	0,096	Prolactin inhibitor
0,018	0,009	Antiprotozoal activity enhancer
0,098	0,089	Coagulant
0,074	0,065	Isocitrate lyase inhibitor

0,075	0,066	[acyl-carrier-protein] S-malonyltransferase inhibitor
0,116	0,107	Quinoline-4-carboxylate 2-oxidoreductase inhibitor
0,090	0,081	Antineoplastic (squamous cell carcinoma)
0,056	0,047	Altronate dehydratase inhibitor
0,048	0,040	Tubulin GTPase inhibitor
0,043	0,035	Glucose-1-phosphate adenylyltransferase inhibitor
0,016	0,008	Kanamycin kinase inhibitor
0,049	0,041	D-Alanine-poly(phosphoribitol) ligase inhibitor
0,042	0,034	Fructose 5-dehydrogenase (NADP+) inhibitor
0,026	0,018	Tartrate dehydrogenase inhibitor
0,084	0,076	Neuropeptide FF2 agonist
0,084	0,076	Neuropeptide FF agonist
0,095	0,087	Pyridoxine 5-dehydrogenase inhibitor
0,039	0,032	Glucose-1-phosphatase inhibitor
0,108	0,101	Saccharopine dehydrogenase (NADP+, L-glutamate-forming) inhibitor
0,022	0,015	Cortisone alpha-reductase inhibitor
0,090	0,083	Glutamine-tRNA ligase inhibitor
0,142	0,135	Antinaupathic
0,070	0,063	4-Pyridoxolactonase inhibitor
0,207	0,200	Nicotinate dehydrogenase inhibitor
0,149	0,142	Beta-carotene 15,15'-monooxygenase inhibitor
0,068	0,061	1-Pyrroline-5-carboxylate dehydrogenase inhibitor
0,050	0,043	Chalcone isomerase inhibitor
0,135	0,128	Atrolysin A inhibitor
0,037	0,030	Kainate receptor agonist
0,069	0,063	Thiosulfate sulfurtransferase inhibitor
0,081	0,074	Glycine transaminase inhibitor
0,050	0,044	Pyruvate, water dikinase inhibitor
0,114	0,108	UGT2B15 substrate
0,069	0,063	Serine-glyoxylate transaminase inhibitor
0,119	0,113	N-Carbamoyl-D-amino acid hydrolase inhibitor
0,109	0,103	Protein-glutamate methylesterase inhibitor
0,012	0,006	Prostaglandin EP12 antagonist
0,080	0,075	Glycine hydroxymethyltransferase inhibitor
0,036	0,030	Glucosylceramidase inhibitor
0,038	0,033	Strombine dehydrogenase inhibitor
0,067	0,062	Aminolevulinate transaminase inhibitor

0,038	0,033	Sodium-dependent vitamin C transporter 2 inhibitor
0,088	0,083	Phosphoglycerate mutase inhibitor
0,043	0,038	Polyphosphate kinase inhibitor
0,129	0,125	Glucuronate isomerase inhibitor
0,087	0,083	Chloramphenicol O-acetyltransferase inhibitor
0,033	0,029	Ribose-5-phosphate adenylyltransferase inhibitor
0,054	0,050	Urate transporter 1 inhibitor
0,042	0,038	Carboxy-cis,cis-muconate cyclase inhibitor
0,065	0,061	Phosphoglycolate phosphatase inhibitor
0,058	0,054	Dihydrodipicolinate synthase inhibitor
0,073	0,069	Carboxypeptidase M inhibitor
0,033	0,029	RNA agonist
0,024	0,020	Dolichyldiphosphatase inhibitor
0,182	0,178	Choline-phosphate cytidyltransferase inhibitor
0,043	0,040	Bis(5'-nucleosyl)-tetraphosphatase (symmetrical) inhibitor
0,032	0,029	Diphosphate-serine phosphotransferase inhibitor
0,037	0,034	Adenylate cyclase I inhibitor
0,024	0,021	Cathepsin S inhibitor
0,045	0,041	Glutamate uptake inhibitor
0,053	0,050	Aryl hydrocarbon receptor antagonist
0,102	0,100	Heat shock protein 70 agonist
0,016	0,013	CYP11B1 substrate
0,034	0,032	Phosphoserine transaminase inhibitor
0,096	0,094	Reductase inhibitor
0,111	0,109	Diphosphomevalonate decarboxylase inhibitor
0,036	0,034	[Isocitrate dehydrogenase (NADP+)] kinase inhibitor
0,074	0,072	Alcohol oxidase inhibitor
0,123	0,121	Phosphatidate phosphatase inhibitor
0,098	0,096	Deoxycytidylate 5-hydroxymethyltransferase inhibitor
0,058	0,056	Citrate (Si)-synthase inhibitor
0,143	0,142	Histidinol-phosphatase inhibitor
0,222	0,220	CYP3A5 substrate
0,027	0,025	Glutamate (mGluR5a) agonist
0,027	0,025	Glutamate (mGluR1a) agonist
0,058	0,057	Fumarylacetoacetase inhibitor
0,161	0,160	Hydroxylamine reductase inhibitor
0,088	0,087	Lysyl endopeptidase inhibitor

0,093	0,093	Estrone sulfotransferase inhibitor
0,123	0,122	MDM2 inhibitor
0,058	0,058	NMN nucleosidase inhibitor
0,044	0,044	Mannosyl-oligosaccharide glucosidase inhibitor
0,140	0,140	UGT1A1 substrate

Complex 3 All

☒ All
 ☐ Pa>Pi
 ☐ Pa>0,3
 ☐ Pa>0,7

Pa	Pi	Activity
0,850	0,001	Prostaglandin E1 antagonist
0,836	0,004	Ophthalmic drug
0,824	0,003	Antiglaucomic
0,831	0,023	Phobic disorders treatment
0,799	0,011	Nicotinic alpha6beta3beta4alpha5 receptor antagonist
0,767	0,002	Gestagen antagonist
0,760	0,013	5-O-(4-coumaroyl)-D-quinic 3'-monooxygenase inhibitor
0,778	0,031	Testosterone 17beta-dehydrogenase (NADP+) inhibitor
0,760	0,016	Nicotinic alpha2beta2 receptor antagonist
0,760	0,029	Acrocyndropepsin inhibitor
0,760	0,029	Saccharopepsin inhibitor
0,760	0,029	Chymosin inhibitor
0,720	0,008	Glucan 1,4-alpha-maltotriohydrolase inhibitor
0,671	0,005	Antineoplastic (non-Hodgkin's lymphoma)
0,696	0,034	Sugar-phosphatase inhibitor
0,683	0,022	Alkylacetyl glycerophosphatase inhibitor
0,689	0,028	Acylcarnitine hydrolase inhibitor
0,665	0,008	Insulin promoter
0,702	0,050	CYP2J substrate
0,642	0,005	Imidazoline receptor agonist
0,677	0,045	Polyporopepsin inhibitor
0,696	0,070	Ubiquinol-cytochrome-c reductase inhibitor
0,657	0,037	Glutamyl endopeptidase II inhibitor
0,646	0,030	Ribulose-phosphate 3-epimerase inhibitor

0,683	0,069	Aspulvinone dimethylallyltransferase inhibitor
0,649	0,047	CYP2J2 substrate
0,635	0,039	NADPH peroxidase inhibitor
0,618	0,024	Cytoprotectant
0,616	0,023	27-Hydroxycholesterol 7alpha-monooxygenase inhibitor
0,624	0,033	Complement factor D inhibitor
0,595	0,004	Pediculicide
0,592	0,011	Dolichyl-diphosphooligosaccharide-protein glycotransferase inhibitor
0,579	0,005	Antineoplastic (ovarian cancer)
0,584	0,029	Chloride peroxidase inhibitor
0,595	0,046	Alkenylglycerophosphocholine hydrolase inhibitor
0,596	0,051	TP53 expression enhancer
0,550	0,005	CYP2B11 substrate
0,560	0,019	Mannan endo-1,4-beta-mannosidase inhibitor
0,572	0,033	Gastrin inhibitor
0,563	0,027	L-glutamate oxidase inhibitor
0,596	0,066	Glycosylphosphatidylinositol phospholipase D inhibitor
0,550	0,020	CYP2A4 substrate
0,574	0,061	Phosphatase inhibitor
0,513	0,009	Imidazoline I1 receptor agonist
0,546	0,046	Platelet aggregation stimulant
0,537	0,044	JAK2 expression inhibitor
0,549	0,060	Omptin inhibitor
0,518	0,033	Antipruritic, allergic
0,530	0,048	UDP-N-acetylglucosamine 4-epimerase inhibitor
0,528	0,047	Glucan endo-1,6-beta-glucosidase inhibitor
0,536	0,056	Lysase inhibitor
0,522	0,043	Pterin deaminase inhibitor
0,531	0,052	Macrophage colony stimulating factor agonist
0,502	0,027	Glyoxylate reductase inhibitor
0,493	0,019	Albendazole monooxygenase inhibitor
0,521	0,049	Glucan endo-1,3-beta-D-glucosidase inhibitor
0,521	0,049	Venombin AB inhibitor
0,498	0,031	Pullulanase inhibitor
0,489	0,022	Cutinase inhibitor
0,484	0,018	Dementia treatment
0,474	0,009	Acaricide

0,523	0,058	Antidyskinetic
0,498	0,033	CYP2B5 substrate
0,510	0,052	Limulus clotting factor B inhibitor
0,491	0,038	3-Hydroxybenzoate 6-monooxygenase inhibitor
0,492	0,039	Respiratory analeptic
0,505	0,058	Carboxypeptidase Taq inhibitor
0,475	0,028	Peptidoglycan glycosyltransferase inhibitor
0,508	0,061	Electron-transferring-flavoprotein dehydrogenase inhibitor
0,494	0,047	Feruloyl esterase inhibitor
0,479	0,033	IgA-specific serine endopeptidase inhibitor
0,522	0,079	Pseudolysin inhibitor
0,476	0,034	All-trans-retinyl-palmitate hydrolase inhibitor
0,455	0,013	RNA directed DNA polymerase inhibitor
0,488	0,046	Exoribonuclease II inhibitor
0,520	0,084	Kidney function stimulant
0,445	0,010	Endo-1,3(4)-beta-glucanase inhibitor
0,485	0,051	1,4-Lactonase inhibitor
0,503	0,071	Phthalate 4,5-dioxygenase inhibitor
0,472	0,045	Cyclic AMP agonist
0,496	0,069	Platelet adhesion inhibitor
0,463	0,039	TNF expression inhibitor
0,445	0,020	Hematopoietic inhibitor
0,459	0,035	Na ⁺ -transporting two-sector ATPase inhibitor
0,485	0,062	GST A substrate
0,543	0,121	Membrane permeability inhibitor
0,453	0,031	Aspergillopepsin I inhibitor
0,469	0,051	Hydrogen dehydrogenase inhibitor
0,462	0,046	Gluconate 5-dehydrogenase inhibitor
0,466	0,050	Trimethylamine-oxide aldolase inhibitor
0,430	0,017	Oxidizing agent
0,442	0,031	Cardiovascular analeptic
0,424	0,012	Sweetener
0,480	0,069	Phospholipid-translocating ATPase inhibitor
0,448	0,041	Acetylesterase inhibitor
0,487	0,083	Acetylcholine neuromuscular blocking agent
0,438	0,037	Simian immunodeficiency virus proteinase inhibitor
0,463	0,063	Phosphatidylcholine-retinol O-acyltransferase inhibitor

0,411	0,013	Uterine relaxant
0,398	0,002	Transactivator transcription protein inhibitor
0,490	0,096	Fusarinine-C ornithinesterase inhibitor
0,497	0,103	Membrane integrity agonist
0,418	0,025	Xylan endo-1,3-beta-xylosidase inhibitor
0,451	0,060	Arginine 2-monooxygenase inhibitor
0,412	0,024	Taurine-2-oxoglutarate transaminase inhibitor
0,435	0,048	Alkenylglycerophosphoethanolamine hydrolase inhibitor
0,409	0,022	Sorbitol-6-phosphate 2-dehydrogenase inhibitor
0,469	0,083	Protein-disulfide reductase (glutathione) inhibitor
0,426	0,041	Limulus clotting factor C inhibitor
0,458	0,074	Thioredoxin inhibitor
0,388	0,007	Insecticide
0,453	0,072	Alopecia treatment
0,413	0,033	Sulfite oxidase inhibitor
0,394	0,015	Antipruritic, non-allergic
0,410	0,032	Glucan 1,4-alpha-maltotetraohydrolase inhibitor
0,432	0,056	Cl--transporting ATPase inhibitor
0,425	0,048	Analeptic
0,423	0,048	Acetylgalactosaminyl-O-glycosyl-glycoprotein beta-1,3-N-acetylglucosaminyltransferase inhibitor
0,404	0,030	H+-exporting ATPase inhibitor
0,404	0,032	Poly(beta-D-mannuronate) lyase inhibitor
0,467	0,095	CYP3A2 substrate
0,411	0,040	EIF4E expression inhibitor
0,400	0,030	Glycolate dehydrogenase inhibitor
0,393	0,023	CDP-diacylglycerol-glycerol-3-phosphate 3-phosphatidyltransferase inhibitor
0,396	0,027	Shikimate O-hydroxycinnamoyltransferase inhibitor
0,433	0,065	Fatty-acyl-CoA synthase inhibitor
0,423	0,055	Formaldehyde transketolase inhibitor
0,414	0,048	Cyclohexanone monooxygenase inhibitor
0,430	0,064	Fragilysin inhibitor
0,416	0,051	N-acetylneuraminate 7-O(or 9-O)-acetyltransferase inhibitor
0,417	0,054	Antipruritic
0,422	0,058	Apyrase inhibitor
0,365	0,003	Antineoplastic (bone cancer)
0,434	0,072	Lysine 2,3-aminomutase inhibitor
0,416	0,055	CYP2A8 substrate

0,373	0,012	Vascular dementia treatment
0,362	0,004	CYP2B18 substrate
0,425	0,068	Dehydro-L-gulonate decarboxylase inhibitor
0,407	0,051	Thymidylate 5'-phosphatase inhibitor
0,362	0,006	GST T substrate
0,362	0,006	GST T1-1 substrate
0,357	0,001	Prostaglandin EP2 agonist
0,358	0,002	Interleukin 10 antagonist
0,360	0,006	Osteoarthritis treatment
0,393	0,038	Antiviral (Herpes)
0,445	0,091	Ovulation inhibitor
0,383	0,030	Clavamate synthase inhibitor
0,360	0,007	Alpha-pinene-oxide decyclase inhibitor
0,436	0,084	Antiviral (Picornavirus)
0,386	0,035	CYP7 inhibitor
0,359	0,007	Ligase inhibitor
0,376	0,025	Myeloblastin inhibitor
0,368	0,018	2-Haloacid dehalogenase (configuration-inverting) inhibitor
0,460	0,112	Calcium channel (voltage-sensitive) activator
0,396	0,050	GABA aminotransferase inhibitor
0,408	0,065	CYP2D15 substrate
0,358	0,015	Maltose-transporting ATPase inhibitor
0,410	0,068	CYP2D16 substrate
0,412	0,072	Vasoprotector
0,379	0,039	2-Haloacid dehalogenase inhibitor
0,386	0,047	Creatininase inhibitor
0,377	0,038	Undecaprenyldiphospho-muramoylpentapeptide beta-N-acetylglucosaminyltransferase inhibitor
0,388	0,050	Malate oxidase inhibitor
0,418	0,081	CYP3A1 substrate
0,437	0,101	CYP2C12 substrate
0,430	0,096	NADPH-cytochrome-c2 reductase inhibitor
0,375	0,041	Dextranase inhibitor
0,364	0,031	Yeast ribonuclease inhibitor
0,369	0,035	DELTA14-sterol reductase inhibitor
0,357	0,024	Sclerosant
0,374	0,042	Mannose isomerase inhibitor
0,367	0,037	Fructan beta-fructosidase inhibitor

0,414	0,084	Leukopoiesis stimulant
0,367	0,038	Cyclomaltodextrinase inhibitor
0,410	0,082	Erythropoiesis stimulant
0,350	0,024	Styrene-oxide isomerase inhibitor
0,332	0,007	Antineoplastic, alkylator
0,382	0,058	Mucinaminyserine mucinaminidase inhibitor
0,348	0,025	Phosphoenolpyruvate mutase inhibitor
0,340	0,018	Undecaprenyl-diphosphatase inhibitor
0,393	0,070	Polyamine-transporting ATPase inhibitor
0,370	0,048	Nitrite reductase (NO-forming) inhibitor
0,424	0,103	Chlordecone reductase inhibitor
0,381	0,060	Glycerol-3-phosphate oxidase inhibitor
0,410	0,091	Antiseborrheic
0,371	0,054	CYP2D2 inhibitor
0,405	0,089	Neurotransmitter antagonist
0,345	0,030	D-alanine 2-hydroxymethyltransferase inhibitor
0,413	0,099	5 Hydroxytryptamine uptake stimulant
0,389	0,075	Beta-adrenergic receptor kinase inhibitor
0,389	0,075	G-protein-coupled receptor kinase inhibitor
0,368	0,054	Steroid N-acetylglucosaminytransferase inhibitor
0,357	0,044	2-Hydroxymuconate-semialdehyde hydrolase inhibitor
0,381	0,068	Phenol O-methyltransferase inhibitor
0,378	0,066	Antimyopathies
0,398	0,089	(R)-6-hydroxynicotine oxidase inhibitor
0,352	0,043	Opioid kappa 3 receptor antagonist
0,361	0,053	Phosphopantothenoylecysteine decarboxylase inhibitor
0,387	0,080	Ecdysone 20-monooxygenase inhibitor
0,338	0,031	Hyaluronic acid agonist
0,339	0,034	GST M substrate
0,369	0,064	Tpr proteinase (<i>Porphyromonas gingivalis</i>) inhibitor
0,372	0,068	(S)-6-hydroxynicotine oxidase inhibitor
0,374	0,071	Adenomatous polyposis treatment
0,344	0,042	Glyoxylate oxidase inhibitor
0,338	0,037	Carminative
0,357	0,056	N-formylmethionyl-peptidase inhibitor
0,379	0,079	Linoleate diol synthase inhibitor
0,372	0,072	Membrane permeability enhancer

0,300	0,002	Prostaglandin D2 agonist
0,383	0,086	4-Nitrophenol 2-monooxygenase inhibitor
0,389	0,092	Histamine release stimulant
0,325	0,028	Licheninase inhibitor
0,382	0,086	Fibrolase inhibitor
0,297	0,004	Insulin secretagoues
0,352	0,059	Peptide-N4-(N-acetyl-beta-glucosaminy)asparagine amidase inhibitor
0,371	0,078	Aspartate-phenylpyruvate transaminase inhibitor
0,379	0,086	Dimethylargininase inhibitor
0,389	0,097	Aminobutyraldehyde dehydrogenase inhibitor
0,397	0,105	Antineoplastic
0,318	0,026	Fumarate reductase (NADH) inhibitor
0,329	0,038	CYP2B10 substrate
0,324	0,035	Oryzin inhibitor
0,329	0,040	2,3,4,5-Tetrahydropyridine-2,6-dicarboxylate N-succinyltransferase inhibitor
0,365	0,078	Manganese peroxidase inhibitor
0,365	0,081	Pro-opiomelanocortin converting enzyme inhibitor
0,347	0,064	Phosphoinositide 5-phosphatase inhibitor
0,331	0,048	CYP2A2 substrate
0,374	0,091	CYP2A1 substrate
0,324	0,042	Quinoprotein glucose dehydrogenase inhibitor
0,327	0,044	DNA synthesis inhibitor
0,319	0,037	Chaperonin ATPase inhibitor
0,359	0,080	Caspase 8 stimulant
0,346	0,067	Prostaglandin-A1 DELTA-isomerase inhibitor
0,309	0,031	Galactolipase inhibitor
0,306	0,030	Bisphosphoglycerate mutase inhibitor
0,358	0,082	CYP4A11 substrate
0,337	0,062	Lysostaphin inhibitor
0,351	0,076	Histidine N-acetyltransferase inhibitor
0,336	0,062	tRNA-pseudouridine synthase I inhibitor
0,334	0,061	3-Phytase inhibitor
0,303	0,031	Vitamin-K-epoxide reductase (warfarin-insensitive) inhibitor
0,305	0,033	Aspergillopepsin II inhibitor
0,322	0,051	Hydroxylamine reductase (NADH) inhibitor
0,301	0,030	Antineoplastic (small cell lung cancer)
0,348	0,081	Hydroxylamine oxidase inhibitor

0,303	0,037	Alpha-N-acetylglucosaminidase inhibitor
0,272	0,005	Cytokine release inhibitor
0,307	0,042	Steroid synthesis inhibitor
0,350	0,086	Sphinganine kinase inhibitor
0,332	0,069	RELA expression inhibitor
0,288	0,025	3-Chloro-D-alanine dehydrochlorinase inhibitor
0,296	0,035	Alkylglycerophosphoethanolamine phosphodiesterase inhibitor
0,353	0,091	Rubredoxin-NAD ⁺ reductase inhibitor
0,282	0,022	2-Dehydropantoate aldolase inhibitor
0,354	0,095	Pancreatic elastase inhibitor
0,327	0,068	Alcohol dehydrogenase (acceptor) inhibitor
0,320	0,061	CYP2A5 substrate
0,293	0,036	Polyneuridine-aldehyde esterase inhibitor
0,283	0,026	Hydroxysteroid dehydrogenase inhibitor
0,344	0,087	Centromere associated protein inhibitor
0,321	0,067	3-Cyanoalanine hydratase inhibitor
0,304	0,050	CYP2G1 substrate
0,293	0,040	Antihelmintic
0,378	0,126	Antinociceptive
0,301	0,049	CYP2C29 substrate
0,254	0,002	Prostaglandin E2 agonist
0,321	0,070	Glutamine-phenylpyruvate transaminase inhibitor
0,329	0,079	Leukopoiesis inhibitor
0,303	0,053	Transketolase inhibitor
0,291	0,041	N-Acyl-D-aspartate deacylase inhibitor
0,299	0,050	Linoleoyl-CoA desaturase inhibitor
0,330	0,080	Methylamine-glutamate N-methyltransferase inhibitor
0,291	0,043	Protein-Npi-phosphohistidine-sugar phosphotransferase inhibitor
0,374	0,126	Thromboxane B2 antagonist
0,304	0,056	Antihypercholesterolemic
0,358	0,111	2-Dehydropantoate 2-reductase inhibitor
0,326	0,079	CYP2F1 substrate
0,286	0,040	Poly(alpha-L-gulonate) lyase inhibitor
0,335	0,089	Cytochrome P450 stimulant
0,328	0,082	(R)-Pantolactone dehydrogenase (flavin) inhibitor
0,265	0,021	Galacturan 1,4-alpha-galacturonidase inhibitor
0,319	0,075	ADP-thymidine kinase inhibitor

0,335	0,092	Glucose oxidase inhibitor
0,286	0,042	Pseudouridylate synthase inhibitor
0,315	0,072	Phosphatidylinositol diacylglycerol-lyase inhibitor
0,261	0,019	Deoxyribonuclease I inhibitor
0,319	0,077	Chenodeoxycholytaurine hydrolase inhibitor
0,246	0,006	4-Carboxymethyl-4-methylbutenolide mutase inhibitor
0,258	0,018	Melanin inhibitor
0,268	0,028	Alpha-glucuronidase inhibitor
0,335	0,097	Endopeptidase So inhibitor
0,309	0,071	Chitosanase inhibitor
0,304	0,066	Cytostatic
0,298	0,061	Lysyl oxidase inhibitor
0,319	0,082	Fucoesterol-epoxide lyase inhibitor
0,282	0,046	Horrisysin inhibitor
0,294	0,058	Antiparasitic
0,329	0,094	CYP2C9 inducer
0,247	0,012	Arachidonic acid antagonist
0,263	0,028	Tropinesterase inhibitor
0,291	0,057	Opheline kinase inhibitor
0,291	0,057	Taurocyamine kinase inhibitor
0,309	0,076	Adenylyl-sulfate reductase inhibitor
0,276	0,044	Dopamine release stimulant
0,304	0,071	N-acylmannosamine kinase inhibitor
0,278	0,046	Antiperistaltic
0,334	0,103	Gonadotropin antagonist
0,308	0,077	CYP3A7 substrate
0,334	0,103	Biotinidase inhibitor
0,294	0,063	Antineoplastic (pancreatic cancer)
0,289	0,059	NF-E2-related factor 2 stimulant
0,328	0,100	Malate dehydrogenase (acceptor) inhibitor
0,258	0,030	Rhizopuspepsin inhibitor
0,282	0,054	Adrenaline release stimulant
0,291	0,064	Long-chain-aldehyde dehydrogenase inhibitor
0,328	0,101	S-formylglutathione hydrolase inhibitor
0,247	0,020	Antihypotensive
0,282	0,055	Levanase inhibitor
0,299	0,075	D-lactaldehyde dehydrogenase inhibitor

0,288	0,063	Glycerol-3-phosphate dehydrogenase inhibitor
0,316	0,092	Sulfite dehydrogenase inhibitor
0,358	0,134	Octopamine antagonist
0,272	0,049	2-Oxoaldehyde dehydrogenase (NADP+) inhibitor
0,271	0,048	UGT2B28 substrate
0,298	0,075	Isopenicillin-N epimerase inhibitor
0,265	0,043	Anthranilate-CoA ligase inhibitor
0,295	0,073	Peptide alpha-N-acetyltransferase inhibitor
0,280	0,059	Bisphosphoglycerate phosphatase inhibitor
0,355	0,134	Fructose 5-dehydrogenase inhibitor
0,280	0,060	Dipeptidase E inhibitor
0,289	0,069	Glutamate-tRNA ligase inhibitor
0,235	0,015	Trehalose-phosphatase inhibitor
0,282	0,063	Endothelial growth factor antagonist
0,256	0,037	D-xylulose reductase inhibitor
0,268	0,050	2-Hydroxy-3-oxoadipate synthase inhibitor
0,250	0,033	1,4-Alpha-glucan branching enzyme inhibitor
0,262	0,045	Mannitol-1-phosphatase inhibitor
0,307	0,090	Plastoquinol-plastocyanin reductase inhibitor
0,289	0,072	Pyruvate decarboxylase inhibitor
0,278	0,062	Salicylate 1-monooxygenase inhibitor
0,245	0,029	BRAF expression inhibitor
0,309	0,095	MMP9 expression inhibitor
0,278	0,064	MAP kinase kinase 4 inhibitor
0,270	0,056	Benzaldehyde dehydrogenase (NADP+) inhibitor
0,242	0,028	GABA B receptor agonist
0,289	0,075	N-benzyloxycarbonylglycine hydrolase inhibitor
0,305	0,092	Peptidyl-dipeptidase Dcp inhibitor
0,263	0,050	Aldosterone antagonist
0,266	0,053	Flavin-containing monooxygenase inhibitor
0,297	0,084	Enteropeptidase inhibitor
0,230	0,017	Alpha-N-acetylgalactosaminidase inhibitor
0,275	0,062	Gluconolactonase inhibitor
0,258	0,046	N-acetyllactosaminide beta-1,3-N-acetylglucosaminyltransferase inhibitor
0,278	0,066	NADH kinase inhibitor
0,248	0,037	NAD+ synthase (glutamine-hydrolysing) inhibitor
0,262	0,052	Glutarate-semialdehyde dehydrogenase inhibitor

0,338	0,130	Pin1 inhibitor
0,223	0,016	(R)-limonene 6-monooxygenase inhibitor
0,313	0,106	Lipoprotein lipase inhibitor
0,222	0,015	Antiemphysemic
0,210	0,003	Lipase inhibitor
0,251	0,044	Dynein ATPase inhibitor
0,312	0,106	5 Hydroxytryptamine release stimulant
0,320	0,115	Nitrate reductase (cytochrome) inhibitor
0,251	0,046	Cellulose 1,4-beta-cellobiosidase inhibitor
0,245	0,041	Aureolysin inhibitor
0,286	0,081	Methylumbelliferyl-acetate deacetylase inhibitor
0,303	0,099	Cyanoalanine nitrilase inhibitor
0,233	0,030	Alkene monooxygenase inhibitor
0,252	0,051	Prunasin beta-glucosidase inhibitor
0,268	0,067	Thiamine pyridinylase inhibitor
0,265	0,065	Morphine 6-dehydrogenase inhibitor
0,257	0,057	N-hydroxy-2-acetamidofluorene reductase inhibitor
0,222	0,022	Riboflavin phosphotransferase inhibitor
0,291	0,091	Arylsulfate sulfotransferase inhibitor
0,232	0,032	Aldehyde dehydrogenase inhibitor
0,227	0,028	Ferredoxin-NADP+ reductase inhibitor
0,262	0,063	Transcription factor NF kappa A inhibitor
0,210	0,011	CYP3A5 inducer
0,241	0,042	Aryldialkylphosphatase inhibitor
0,264	0,066	Ethanolamine-phosphate cytidyltransferase inhibitor
0,237	0,039	Inulinase inhibitor
0,284	0,086	P-benzoquinone reductase (NADPH) inhibitor
0,338	0,140	Oxygen scavenger
0,251	0,053	Alpha-1,6-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase inhibitor
0,339	0,142	MAP kinase stimulant
0,375	0,180	Antineurotic
0,244	0,049	Polygalacturonase inhibitor
0,251	0,056	Pappalysin-1 inhibitor
0,258	0,062	Carboxypeptidase D inhibitor
0,275	0,079	Arylmalonate decarboxylase inhibitor
0,225	0,030	Glucan 1,6-alpha-glucosidase inhibitor
0,272	0,077	Opioid dependency treatment

0,274	0,080	Thiosulfate dehydrogenase inhibitor
0,245	0,051	3-Methylbutanal reductase inhibitor
0,235	0,042	Glucan 1,4-beta-glucosidase inhibitor
0,227	0,034	Glycerol-1-phosphatase inhibitor
0,235	0,042	Lactaldehyde reductase inhibitor
0,221	0,028	2,2-Dialkylglycine decarboxylase (pyruvate) inhibitor
0,262	0,070	S-alkylcysteine lyase inhibitor
0,220	0,028	Pancreatic endopeptidase E inhibitor
0,273	0,081	Aspergillus nuclease S1 inhibitor
0,236	0,045	Snapalysin inhibitor
0,244	0,053	Glycine dehydrogenase (decarboxylating) inhibitor
0,239	0,049	Cyclooxygenase substrate
0,213	0,024	Estradiol 17alpha-dehydrogenase inhibitor
0,318	0,129	RNA-directed RNA polymerase inhibitor
0,238	0,049	4-Chlorobenzoyl-CoA dehalogenase inhibitor
0,283	0,094	Chitinase inhibitor
0,298	0,110	Leukotriene-C4 synthase inhibitor
0,225	0,037	Aspartate-tRNA ligase inhibitor
0,243	0,056	GABA C receptor agonist
0,257	0,072	NOS2 expression inhibitor
0,262	0,077	Antibacterial
0,218	0,033	Allantoate deiminase inhibitor
0,222	0,037	Bile-salt sulfotransferase inhibitor
0,251	0,068	Cyclohexyl-isocyanide hydratase inhibitor
0,222	0,039	Cycloartenol synthase inhibitor
0,209	0,027	Carnitine dehydratase inhibitor
0,254	0,072	Thiamine-triphosphatase inhibitor
0,239	0,057	Crotonoyl-[acyl-carrier-protein] hydratase inhibitor
0,242	0,059	Ornithine cyclodeaminase inhibitor
0,268	0,087	4-Coumarate-CoA ligase inhibitor
0,287	0,107	Myc inhibitor
0,193	0,013	Succinate dehydrogenase inhibitor
0,244	0,064	N-acetyllactosamine synthase inhibitor
0,256	0,077	Arylesterase inhibitor
0,212	0,032	L-iduronidase inhibitor
0,238	0,059	N-(long-chain-acyl)ethanolamine deacylase inhibitor
0,216	0,038	Cyclamate sulfohydrolase inhibitor

0,251	0,072	Glutathione dehydrogenase (ascorbate) inhibitor
0,315	0,136	Nicotine dehydrogenase inhibitor
0,252	0,075	Coccolysin inhibitor
0,303	0,125	Apoptosis agonist
0,290	0,113	CYP3A4 inducer
0,209	0,033	Glycopeptide alpha-N-acetylgalactosaminidase inhibitor
0,209	0,033	Glycerone-phosphate O-acyltransferase inhibitor
0,227	0,050	Sedoheptulose-bisphosphatase inhibitor
0,181	0,004	Glycine receptor antagonist
0,251	0,075	Aspartate-ammonia ligase inhibitor
0,226	0,050	Guanosine-3',5'-bis(diphosphate) 3'-diphosphatase inhibitor
0,235	0,059	Ubiquitin thiolesterase inhibitor
0,197	0,022	Interferon antagonist
0,280	0,105	HMOX1 expression enhancer
0,225	0,050	IgA-specific metalloendopeptidase inhibitor
0,235	0,060	Procollagen N-endopeptidase inhibitor
0,299	0,125	Amine dehydrogenase inhibitor
0,282	0,108	CYP3A inducer
0,209	0,036	Retinyl-palmitate esterase inhibitor
0,210	0,037	Acetylenecarboxylate hydratase inhibitor
0,176	0,004	Anesthetic inhalation
0,270	0,099	Ferredoxin-NAD+ reductase inhibitor
0,270	0,099	Naphthalene 1,2-dioxygenase inhibitor
0,290	0,119	Antihelminthic (Nematodes)
0,190	0,020	Interferon gamma antagonist
0,223	0,052	2,3-Dihydroxyindole 2,3-dioxygenase inhibitor
0,252	0,081	Carbon-monoxide dehydrogenase inhibitor
0,267	0,097	Para amino benzoic acid antagonist
0,248	0,078	Cholestanetriol 26-monooxygenase inhibitor
0,270	0,101	Nitrite reductase [NAD(P)H] inhibitor
0,219	0,050	Tetrahydroxynaphthalene reductase inhibitor
0,171	0,003	Prostaglandin EP1 antagonist
0,247	0,079	Phosphatidylcholine-sterol O-acyltransferase inhibitor
0,199	0,033	Valine-tRNA ligase inhibitor
0,183	0,017	Demethylsterigmatocystin 6-O-methyltransferase inhibitor
0,216	0,050	Sterol 3-beta-glucosyltransferase inhibitor
0,256	0,090	Antiviral (Poxvirus)

0,210	0,044	Alkylator
0,284	0,118	NAD(P)+-arginine ADP-ribosyltransferase inhibitor
0,197	0,031	Protein-glucosylgalactosylhydroxylysine glucosidase inhibitor
0,266	0,101	4-Hydroxymandelate oxidase inhibitor
0,263	0,099	DNA-(apurinic or apyrimidinic site) lyase inhibitor
0,225	0,061	Rhodotorulapepsin inhibitor
0,193	0,028	Pectin lyase inhibitor
0,293	0,128	Polarisation stimulant
0,223	0,058	D-threo-aldose 1-dehydrogenase inhibitor
0,207	0,044	Nitric oxide scavenger
0,204	0,041	Phosphoenolpyruvate-protein phosphotransferase inhibitor
0,195	0,032	Glucuronolactone reductase inhibitor
0,232	0,070	Di-trans,poly-cis-decaprenylcistransferase inhibitor
0,240	0,079	Cell wall biosynthesis inhibitor
0,237	0,076	Lactose synthase inhibitor
0,318	0,157	2-Hydroxyquinoline 8-monooxygenase inhibitor
0,180	0,020	Isoamylase inhibitor
0,198	0,039	Antineoplastic (lymphocytic leukemia)
0,231	0,073	Dimethylmaleate hydratase inhibitor
0,244	0,086	Succinate-semialdehyde dehydrogenase [NAD(P)+] inhibitor
0,204	0,047	Antirickettsial
0,218	0,061	Tauropine dehydrogenase inhibitor
0,210	0,054	Leucine dehydrogenase inhibitor
0,243	0,087	Antiviral (CMV)
0,285	0,130	Glutathione thiolesterase inhibitor
0,188	0,033	Gaucher disease treatment
0,234	0,080	[acyl-carrier-protein] S-acetyltransferase inhibitor
0,197	0,043	Dolichyl-phosphatase inhibitor
0,255	0,102	Urethanase inhibitor
0,204	0,051	Farnesyltranstransferase inhibitor
0,194	0,042	Ganglioside galactosyltransferase inhibitor
0,192	0,039	Thioredoxin reductase inhibitor
0,207	0,055	Alpha-amylase inhibitor
0,290	0,138	Spermidine dehydrogenase inhibitor
0,171	0,019	Dry eye syndrome treatment
0,236	0,084	CYP2C3 substrate
0,222	0,072	Glycerol 2-dehydrogenase (NADP+) inhibitor

0,227	0,076	Nardilysin inhibitor
0,226	0,076	Gamma-D-Glutamyl-meso-diaminopimelate peptidase inhibitor
0,217	0,068	UGT2B17 substrate
0,276	0,127	CYP3A3 substrate
0,205	0,056	Serratia marcescens nuclease inhibitor
0,202	0,053	Protein synthesis inhibitor
0,198	0,049	Choline-sulfatase inhibitor
0,277	0,128	CYP2E1 inducer
0,197	0,049	Trans-pentaprenyltranstransferase inhibitor
0,182	0,034	Deoxyribose-phosphate aldolase inhibitor
0,212	0,064	Peptidyl-dipeptidase B inhibitor
0,190	0,042	Saccharolysin inhibitor
0,187	0,039	Protein synthesis stimulant
0,185	0,039	3-Ketovalidoxylamine C-N-lyase inhibitor
0,175	0,028	Choloylglycine hydrolase inhibitor
0,191	0,044	Mannan endo-1,6-alpha-mannosidase inhibitor
0,302	0,155	Antihypoxic
0,271	0,124	Bilirubin oxidase inhibitor
0,226	0,081	Meprin B inhibitor
0,170	0,024	Aconitate decarboxylase inhibitor
0,252	0,106	Tyrosine 3 hydroxylase inhibitor
0,252	0,107	Formate-dihydrofolate ligase inhibitor
0,244	0,099	Aldehyde dehydrogenase (pyrroloquinoline-quinone) inhibitor
0,206	0,061	(S)-3-amino-2-methylpropionate transaminase inhibitor
0,274	0,130	Gamma-guanidinobutyraldehyde dehydrogenase inhibitor
0,189	0,044	Testosterone 17beta-dehydrogenase inhibitor
0,161	0,016	Shab potassium channel blocker
0,195	0,050	Vascular adhesion protein 1 inhibitor
0,245	0,101	AR expression inhibitor
0,195	0,052	Granzyme A inhibitor
0,197	0,054	Gamma-butyrobetaine dioxygenase inhibitor
0,307	0,164	Preneoplastic conditions treatment
0,170	0,027	Pregnane X receptor agonist
0,186	0,043	Glutamate (mGluR5) agonist
0,226	0,084	DNA ligase (ATP) inhibitor
0,186	0,044	Polar-amino-acid-transporting ATPase inhibitor
0,182	0,041	Allantoinase inhibitor

0,146	0,004	Prostaglandin EP2 antagonist
0,168	0,028	Glyceraldehyde-3-phosphate dehydrogenase (phosphorylating) inhibitor
0,177	0,037	Xylose isomerase inhibitor
0,224	0,085	Glycine amidinotransferase inhibitor
0,247	0,108	Antifungal
0,254	0,115	Antiinflammatory, intestinal
0,214	0,075	CYP2A3 substrate
0,242	0,103	Leukotriene-B4 20-monooxygenase inhibitor
0,238	0,100	Phosphatidylserine decarboxylase inhibitor
0,192	0,054	ADP-ribosylarginine hydrolase inhibitor
0,150	0,012	Fatty-acyl-ethyl-ester synthase inhibitor
0,220	0,082	Proliferative diseases treatment
0,184	0,046	N-acetylneuraminate synthase inhibitor
0,194	0,056	N6-methyl-lysine oxidase inhibitor
0,246	0,108	Methylenetetrahydrofolate reductase (NADPH) inhibitor
0,198	0,061	2,4-Dichlorophenol 6-monooxygenase inhibitor
0,189	0,053	Laminaribiose phosphorylase inhibitor
0,172	0,036	Glucarate dehydratase inhibitor
0,231	0,095	DNA-3-methyladenine glycosylase I inhibitor
0,186	0,050	Glutamin-(asparagin-)ase inhibitor
0,302	0,166	Sulfur reductase inhibitor
0,146	0,011	Imidazoleglycerol-phosphate dehydratase inhibitor
0,175	0,040	Cholesterol oxidase inhibitor
0,144	0,010	Acetylcholine M3 receptor agonist
0,165	0,031	Trimethyllysine dioxygenase inhibitor
0,179	0,046	Alpha-N-arabinofuranosidase inhibitor
0,341	0,208	Mucomembranous protector
0,233	0,100	Hepatoprotectant
0,238	0,105	Gingipain K inhibitor
0,241	0,109	Cytochrome-b5 reductase inhibitor
0,237	0,104	Cis-1,2-dihydro-1,2-dihydroxynaphthalene dehydrogenase inhibitor
0,172	0,040	Asparagine-tRNA ligase inhibitor
0,183	0,051	Galactokinase inhibitor
0,260	0,128	Loop diuretic
0,287	0,155	Caspase 3 stimulant
0,174	0,043	N-(5-amino-5-carboxypentanoyl)-L-cysteinyl-D-valine synthase inhibitor
0,277	0,146	N-hydroxyarylamine O-acetyltransferase inhibitor

0,146	0,016	Mycodextranase inhibitor
0,192	0,061	UGT1A5 substrate
0,265	0,134	Mitochondrial processing peptidase inhibitor
0,193	0,063	Tentoxilysin inhibitor
0,205	0,075	Serine-pyruvate transaminase inhibitor
0,220	0,090	Prolyl aminopeptidase inhibitor
0,232	0,103	Indanol dehydrogenase inhibitor
0,161	0,031	4-Alpha-glucanotransferase inhibitor
0,191	0,061	Isopenicillin-N synthase inhibitor
0,162	0,033	(S)-carnitine 3-dehydrogenase inhibitor
0,243	0,114	4-Methoxybenzoate monooxygenase (O-demethylating) inhibitor
0,232	0,104	Acidifying agent non gastric
0,170	0,041	Acyl-lysine deacylase inhibitor
0,273	0,145	Menopausal disorders treatment
0,239	0,112	ICAM1 expression inhibitor
0,265	0,138	Retinoic acid metabolism inhibitor
0,203	0,077	Cyclopropane-fatty-acyl-phospholipid synthase inhibitor
0,200	0,073	Signal peptidase I inhibitor
0,316	0,190	Taurine dehydrogenase inhibitor
0,167	0,041	Serine 3-dehydrogenase inhibitor
0,141	0,016	Gentamicin 2''-nucleotidyltransferase inhibitor
0,191	0,066	CDP-4-dehydro-6-deoxyglucose reductase inhibitor
0,158	0,033	Creatinase inhibitor
0,193	0,068	Antihelminthic (Fasciola)
0,188	0,063	Glyoxylate reductase (NADP+) inhibitor
0,188	0,064	Sphinganine-1-phosphate aldolase inhibitor
0,224	0,099	CYP2B substrate
0,233	0,110	Sigma receptor agonist
0,151	0,028	Thermomycin inhibitor
0,136	0,013	Alpha glucosidase inhibitor
0,190	0,067	3-Hydroxy-4-oxoquinoline 2,4-dioxygenase inhibitor
0,166	0,043	Selenocysteine lyase inhibitor
0,150	0,027	DELTA24-sterol reductase inhibitor
0,216	0,093	Uroporphyrinogen-III synthase inhibitor
0,129	0,007	Progesterone agonist
0,197	0,075	Antihematotoxic
0,168	0,047	Valine decarboxylase inhibitor

0,131	0,009	Osmotic diuretic
0,216	0,094	Antifibrinolytic
0,181	0,059	GST M1-1 substrate
0,189	0,067	Glutamate 5-kinase inhibitor
0,211	0,091	Peroxidase substrate
0,261	0,141	Cholesterol antagonist
0,183	0,063	N-acetylneuraminate 4-O-acetyltransferase inhibitor
0,148	0,028	Homocysteine desulhydrase inhibitor
0,141	0,021	Phosphatidylinositol 3-kinase stimulant
0,175	0,055	Galactose oxidase inhibitor
0,246	0,126	Alkane 1-monooxygenase inhibitor
0,147	0,027	Secretase alpha stimulant
0,147	0,027	Secretase stimulant
0,215	0,096	Oxytocic
0,167	0,048	Pectate lyase inhibitor
0,136	0,018	High-mannose-oligosaccharide beta-1,4-N-acetylglucosaminyltransferase inhibitor
0,151	0,033	Choline dehydrogenase inhibitor
0,206	0,088	Bothrolysin inhibitor
0,162	0,043	Methionine decarboxylase inhibitor
0,175	0,057	3-Carboxyethylcatechol 2,3-dioxygenase inhibitor
0,164	0,046	CDP-diacylglycerol-inositol 3-phosphatidyltransferase inhibitor
0,161	0,043	Glutamate-1-semialdehyde 2,1-aminomutase inhibitor
0,204	0,086	Aminomuconate-semialdehyde dehydrogenase inhibitor
0,144	0,026	Beta-amylase inhibitor
0,159	0,041	Carboxymethylenebutenolidase inhibitor
0,200	0,084	Retinal dehydrogenase inhibitor
0,172	0,056	Methyltransferase substrate
0,146	0,030	2-Dehydropantolactone reductase (A-specific) inhibitor
0,127	0,012	Alpha,alpha-trehalose phosphorylase inhibitor
0,190	0,075	CYP4A2 substrate
0,221	0,106	Methane monooxygenase inhibitor
0,183	0,068	Alkylglycerone-phosphate synthase inhibitor
0,218	0,104	UGT2B4 substrate
0,237	0,123	Analgesic stimulant
0,194	0,080	2,6-Dihydroxypyridine 3-monooxygenase inhibitor
0,146	0,033	Nicotinamide-nucleotide adenyltransferase inhibitor
0,158	0,046	Dihydrouracil dehydrogenase (NAD+) inhibitor

0,251	0,138	Antiviral (Adenovirus)
0,176	0,063	Vomilenine glucosyltransferase inhibitor
0,148	0,036	D-arabinonolactone oxidase inhibitor
0,133	0,020	Alternansucrase inhibitor
0,191	0,079	Phosphatidylglycerophosphatase inhibitor
0,180	0,068	Mitochondrial intermediate peptidase inhibitor
0,176	0,065	tRNA nucleotidyltransferase inhibitor
0,178	0,067	Lipoxygenase substrate
0,142	0,031	Glutamine-pyruvate transaminase inhibitor
0,143	0,032	Valine dehydrogenase (NADP+) inhibitor
0,177	0,067	Lactate 2-monooxygenase inhibitor
0,182	0,071	CYP2D1 substrate
0,167	0,057	Geranylgeranyl-diphosphate geranylgeranyltransferase inhibitor
0,218	0,108	Prostaglandin-E2 9-reductase inhibitor
0,221	0,112	Cathepsin T inhibitor
0,152	0,043	Endo-1,4-beta-xylanase inhibitor
0,243	0,134	4-Hydroxyproline epimerase inhibitor
0,178	0,069	Carnosine synthase inhibitor
0,175	0,066	UGT2B9 substrate
0,255	0,146	Membrane integrity antagonist
0,187	0,078	UGT2B10 substrate
0,165	0,057	SMN2 expression enhancer
0,131	0,023	Homoserine O-succinyltransferase inhibitor
0,176	0,067	Brachyurin inhibitor
0,134	0,025	Tagaturonate reductase inhibitor
0,134	0,025	Fructuronate reductase inhibitor
0,130	0,022	Amino-acid racemase inhibitor
0,123	0,015	Heme oxygenase inhibitor
0,187	0,080	2-Enoate reductase inhibitor
0,117	0,010	Inositol 1,4,5-triphosphate receptor antagonist
0,133	0,026	Hair growth stimulant
0,135	0,029	Rhodopsin kinase inhibitor
0,149	0,043	Phosphonoacetate hydrolase inhibitor
0,146	0,039	1-Aminocyclopropane-1-carboxylate deaminase inhibitor
0,201	0,094	Methanol dehydrogenase inhibitor
0,140	0,033	Glucan 1,3-beta-glucosidase inhibitor
0,224	0,118	4-Nitrophenylphosphatase inhibitor

0,261	0,155	Superoxide dismutase inhibitor
0,200	0,094	Carnitinamidase inhibitor
0,180	0,074	N-acetyl-gamma-glutamyl-phosphate reductase inhibitor
0,221	0,115	ATP phosphoribosyltransferase inhibitor
0,160	0,055	3-Oxoadipate enol-lactonase inhibitor
0,135	0,030	Deoxycytidine deaminase inhibitor
0,140	0,036	Malonate-semialdehyde dehydrogenase inhibitor
0,198	0,094	Hyponitrite reductase inhibitor
0,223	0,119	CYP2C6 substrate
0,148	0,044	Glycosylphosphatidylinositol diacylglycerol-lyase inhibitor
0,123	0,019	Ca ²⁺ -transporting ATPase inhibitor
0,217	0,113	Cyclic AMP modulator
0,141	0,037	Deoxyribonuclease X inhibitor
0,180	0,076	Rhamnulose-1-phosphate aldolase inhibitor
0,186	0,083	Phenylalanine(histidine) transaminase inhibitor
0,133	0,030	Isomaltulose synthase inhibitor
0,224	0,121	Monoamine uptake inhibitor
0,177	0,074	Dolichol kinase inhibitor
0,130	0,027	Ribose-5-phosphate-ammonia ligase inhibitor
0,170	0,067	3'-Nucleotidase inhibitor
0,200	0,097	Bontoxilysin inhibitor
0,181	0,079	CYP4F2 substrate
0,177	0,075	2,4-Diaminopentanoate dehydrogenase inhibitor
0,177	0,075	3-Hydroxybutyryl-CoA dehydrogenase inhibitor
0,177	0,075	Lysine 6-dehydrogenase inhibitor
0,168	0,066	Allantoin racemase inhibitor
0,163	0,061	Glucosyl transferase inhibitor
0,148	0,046	Beta-mannosidase inhibitor
0,129	0,027	Arabinose isomerase inhibitor
0,157	0,056	Chitin synthase inhibitor
0,229	0,128	RNA synthesis inhibitor
0,115	0,014	Arabinogalactan endo-1,4-beta-galactosidase inhibitor
0,150	0,049	2-Oxoisovalerate dehydrogenase (acylating) inhibitor
0,229	0,128	Venom exonuclease inhibitor
0,185	0,085	Gallate decarboxylase inhibitor
0,174	0,074	Aldehyde dehydrogenase 2 substrate
0,139	0,040	Fructose-2,6-bisphosphate 6-phosphatase inhibitor

0,149	0,049	Antineoplastic antimetabolite
0,166	0,067	Calcium-sensing receptor agonist
0,155	0,056	Hepatocyte nuclear factor antagonist
0,155	0,056	Hepatocyte nuclear factor 4 alpha antagonist
0,111	0,013	D-lactate-2-sulfatase inhibitor
0,260	0,161	CYP19A1 expression inhibitor
0,145	0,047	Urolithiasis treatment
0,123	0,026	2-Methyleneglutarate mutase inhibitor
0,146	0,050	Agmatinase inhibitor
0,190	0,095	Alanine-tRNA ligase inhibitor
0,213	0,117	X-methyl-His dipeptidase inhibitor
0,160	0,065	Homoserine dehydrogenase inhibitor
0,111	0,015	Alpha,alpha-phosphotrehalase inhibitor
0,215	0,120	Myosin ATPase inhibitor
0,147	0,052	D-lactate dehydrogenase inhibitor
0,136	0,040	Cytochrome-c3 hydrogenase inhibitor
0,142	0,047	Lactaldehyde reductase (NADPH) inhibitor
0,152	0,057	Diisopropyl-fluorophosphatase inhibitor
0,138	0,044	Omega-amidase inhibitor
0,142	0,048	CYP19 substrate
0,158	0,064	Cerebroside-sulfatase inhibitor
0,132	0,039	Sorbose dehydrogenase inhibitor
0,101	0,008	Glutamate (mGluR3) agonist
0,193	0,100	Nucleoside oxidase (H2O2-forming) inhibitor
0,175	0,082	6-Carboxyhexanoate-CoA ligase inhibitor
0,175	0,082	Triacetate-lactonase inhibitor
0,175	0,082	Homoaconitate hydratase inhibitor
0,175	0,082	Biotin-CoA ligase inhibitor
0,158	0,066	Lipotropic
0,177	0,085	Camphor 1,2-monooxygenase inhibitor
0,132	0,040	Gluconate dehydratase inhibitor
0,165	0,073	Pyruvate dehydrogenase (cytochrome) inhibitor
0,165	0,073	Trans-2-enoyl-CoA reductase (NAD+) inhibitor
0,169	0,077	Antimycoplasmal
0,176	0,084	Metalloproteinase D inhibitor
0,158	0,067	Gly-X carboxypeptidase inhibitor
0,127	0,036	1,5-Anhydro-D-fructose reductase inhibitor

0,117	0,027	2-Methylcitrate dehydratase inhibitor
0,175	0,084	Guanidinoacetate kinase inhibitor
0,194	0,103	Alcohol dehydrogenase [NAD(P)+] inhibitor
0,129	0,039	Glycerophosphocholine cholinephosphodiesterase inhibitor
0,284	0,194	Mucositis treatment
0,115	0,026	Inositol-3-phosphate synthase inhibitor
0,170	0,081	Inorganic diphosphatase inhibitor
0,150	0,061	Iron-cytochrome-c reductase inhibitor
0,151	0,062	Cellulase inhibitor
0,219	0,130	NADPH-ferrihemoprotein reductase inhibitor
0,112	0,024	11-Cis-retinyl-palmitate hydrolase inhibitor
0,119	0,030	Phosphatidylglycerol-membrane-oligosaccharide glycerophosphotransferase inhibitor
0,129	0,040	Aerobactin synthase inhibitor
0,137	0,049	2-Amino adipate transaminase inhibitor
0,127	0,039	2-Aminoethylphosphonate-pyruvate transaminase inhibitor
0,139	0,051	UDP-N-acetylglucosamine-dolichyl-phosphate N-acetylglucosaminophosphotransferase inhibitor
0,096	0,008	Lipocortins synthesis agonist
0,151	0,063	Phosphoinositide phospholipase C inhibitor
0,138	0,051	Fructose-2,6-bisphosphate 2-phosphatase inhibitor
0,121	0,034	Ketohexokinase inhibitor
0,125	0,038	Beta-D-fucosidase inhibitor
0,177	0,091	Nicotinic alpha4beta2 receptor antagonist
0,130	0,044	Poly(3-hydroxybutyrate) depolymerase inhibitor
0,117	0,031	Beta-N-acetylgalactosaminidase inhibitor
0,189	0,103	Acyl-CoA oxidase inhibitor
0,117	0,031	CYP4F substrate
0,120	0,035	Proline dehydrogenase inhibitor
0,115	0,029	L-fuconate dehydratase inhibitor
0,133	0,047	Diacylglycerol kinase inhibitor
0,144	0,059	Allophanate hydrolase inhibitor
0,132	0,047	Lysozyme inhibitor
0,143	0,058	Haloacetate dehalogenase inhibitor
0,143	0,058	Prepilin peptidase inhibitor
0,152	0,067	UGT2B18 substrate
0,151	0,066	Alpha-Methylacyl-CoA racemase inhibitor
0,107	0,022	Alpha, alpha-trehalose phosphorylase (configuration-retaining) inhibitor

0,154	0,070	3-Aminobutyryl-CoA ammonia-lyase inhibitor
0,116	0,032	Ribonuclease U2 inhibitor
0,121	0,037	Bis(5'-adenosyl)-triphosphatase inhibitor
0,148	0,065	Protein-tyrosine sulfotransferase inhibitor
0,120	0,037	2-Hydroxy-3-oxopropionate reductase inhibitor
0,144	0,061	Glutathione S-transferase substrate
0,101	0,018	Chitin deacetylase inhibitor
0,135	0,053	NAD ⁺ kinase inhibitor
0,147	0,065	CYP4B substrate
0,155	0,074	Penicillopepsin inhibitor
0,095	0,013	Prostaglandin agonist
0,135	0,054	Poly(ADP-ribose) glycohydrolase inhibitor
0,163	0,082	6-Pyruvoyltetrahydropterin synthase inhibitor
0,159	0,077	Polynucleotide 5'-hydroxy-kinase inhibitor
0,120	0,038	Dichloromuconate cycloisomerase inhibitor
0,108	0,026	Alpha-L-fucosidase inhibitor
0,140	0,059	Excitatory amino acid transporter EAAC1 inhibitor
0,137	0,055	Mevalonate kinase inhibitor
0,126	0,045	5 Hydroxytryptamine 4A antagonist
0,156	0,076	Phenylacetate-CoA ligase inhibitor
0,116	0,035	3-Oxosteroid 1-dehydrogenase inhibitor
0,149	0,068	Aldehyde ferredoxin oxidoreductase inhibitor
0,109	0,029	Alpha-L-rhamnosidase inhibitor
0,181	0,101	Sulfite reductase inhibitor
0,166	0,086	Penicillin amidase inhibitor
0,156	0,075	Adenylate cyclase stimulant
0,160	0,079	Antidiabetic (type 2)
0,163	0,083	4-Hydroxyglutamate transaminase inhibitor
0,165	0,084	Picornain 3C inhibitor
0,173	0,093	Urate-ribonucleotide phosphorylase inhibitor
0,142	0,062	Galactose 1-dehydrogenase (NADP ⁺) inhibitor
0,142	0,062	Beta-alanine-pyruvate transaminase inhibitor
0,134	0,054	Diacylglycerol cholinephosphotransferase inhibitor
0,145	0,065	Antibacterial, ophthalmic
0,154	0,074	2-Acylglycerol O-acyltransferase inhibitor
0,165	0,085	Microtubule formation inhibitor
0,090	0,010	Aldehyde dehydrogenase 1A2 inhibitor

0,200	0,121	Glutaminyl-peptide cyclotransferase inhibitor
0,095	0,016	NMDA receptor polyamine site agonist
0,136	0,057	ATP adenylyltransferase inhibitor
0,104	0,025	2-Dehydro-3-deoxy-phosphogluconate aldolase inhibitor
0,088	0,010	Elastase 1 inhibitor
0,270	0,191	Oxidoreductase inhibitor
0,141	0,062	8-Amino-7-oxononanoate synthase inhibitor
0,136	0,057	CYP26A substrate
0,114	0,035	Gluconokinase inhibitor
0,141	0,062	GABA A inverse agonist
0,141	0,062	GABA inverse agonist
0,130	0,052	NADH dehydrogenase inhibitor
0,115	0,037	Cell wall synthesis inhibitor
0,142	0,064	Thiamine-phosphate kinase inhibitor
0,103	0,025	(S)-2-Methylmalate dehydratase inhibitor
0,150	0,072	Oligopeptidase B inhibitor
0,122	0,044	NMDA receptor polyamine site antagonist
0,161	0,083	Creatinine deaminase inhibitor
0,157	0,079	Allyl-alcohol dehydrogenase inhibitor
0,126	0,048	Heparan-alpha-glucosaminide N-acetyltransferase inhibitor
0,127	0,050	Guanidinodeoxy-scylo-inositol-4-phosphatase inhibitor
0,138	0,061	Biotin carboxylase inhibitor
0,190	0,112	Aromatic-hydroxylamine O-acetyltransferase inhibitor
0,141	0,063	Aminocarboxymuconate-semialdehyde decarboxylase inhibitor
0,178	0,101	Dihydroxy-acid dehydratase inhibitor
0,205	0,128	CYP2C10 substrate
0,164	0,087	Acetylornithine deacetylase inhibitor
0,125	0,049	Galactoside 2-alpha-L-fucosyltransferase inhibitor
0,140	0,065	Gingipain R inhibitor
0,112	0,037	2-Dehydro-3-deoxy-L-arabinonate dehydratase inhibitor
0,186	0,111	Histidinol dehydrogenase inhibitor
0,181	0,106	Opine dehydrogenase inhibitor
0,164	0,090	Glutathione peroxidase inhibitor
0,115	0,041	Glyceraldehyde-3-phosphate dehydrogenase (NADP+) inhibitor
0,203	0,129	Gamma-glutamyltransferase inhibitor
0,137	0,063	CYP4B1 substrate
0,105	0,031	Xylan 1,4-beta-xylosidase inhibitor

0,188	0,114	O-aminophenol oxidase inhibitor
0,155	0,082	Aspartoacylase inhibitor
0,134	0,061	(S)-2-hydroxy-acid oxidase inhibitor
0,155	0,083	4-Hydroxybenzoate nonaprenyltransferase inhibitor
0,123	0,050	Pantothenase inhibitor
0,140	0,067	Phenylpyruvate decarboxylase inhibitor
0,204	0,131	Chloride channel activator
0,186	0,114	Ferredoxin hydrogenase inhibitor
0,308	0,236	Antiviral (Rhinovirus)
0,107	0,035	Galactosylgalactosylglucosylceramidase inhibitor
0,114	0,042	Globoside alpha-N-acetylgalactosaminyltransferase inhibitor
0,115	0,043	Lysine decarboxylase inhibitor
0,109	0,037	3-Isopropylmalate dehydrogenase inhibitor
0,096	0,024	CYP4F12 substrate
0,121	0,050	Chondroitin 6-sulfotransferase inhibitor
0,134	0,062	O-acetylhomoserine aminocarboxypropyltransferase inhibitor
0,147	0,076	Aldehyde dehydrogenase (NADP+) inhibitor
0,170	0,099	Indoleacetaldoxime dehydratase inhibitor
0,131	0,060	Isovaleryl-CoA dehydrogenase inhibitor
0,075	0,005	Prostaglandin EP4 antagonist
0,074	0,003	Beta glucosidase inhibitor
0,151	0,081	Pyridoxine 4-oxidase inhibitor
0,160	0,090	Antineoplastic (renal cancer)
0,168	0,099	Thermitase inhibitor
0,141	0,071	2-Oxoglutarate decarboxylase inhibitor
0,120	0,051	Leucine transaminase inhibitor
0,117	0,048	Adenylylsulphatase inhibitor
0,202	0,133	Antiparkinsonian, rigidity relieving
0,132	0,063	Glucan endo-1,3-alpha-glucosidase inhibitor
0,128	0,059	Myocardial infarction treatment
0,122	0,052	UGT2B11 substrate
0,160	0,091	Glycine C-acetyltransferase inhibitor
0,117	0,048	D-glutamate oxidase inhibitor
0,102	0,034	Homospermidine synthase inhibitor
0,097	0,028	Alpha-1,6-mannosyl-glycoprotein 6-beta-N-acetylglucosaminyltransferase inhibitor
0,115	0,046	Phosphofructokinase-1 inhibitor
0,129	0,061	NAD(P)+ transhydrogenase (B-specific) inhibitor

0,128	0,060	Neuropsin inhibitor
0,160	0,092	Stromelysin 2 inhibitor
0,171	0,104	Sodium channel blocker class Ib
0,158	0,091	Hydroxymethylglutaryl-CoA lyase inhibitor
0,203	0,135	CYP2C11 substrate
0,125	0,058	CYP19 inhibitor
0,160	0,092	Arylacetonitrilase inhibitor
0,072	0,005	Antimitotic, Podophyllotoxin-like
0,124	0,058	L-lysine 6-transaminase inhibitor
0,087	0,020	3-Alpha-hydroxysteroid dehydrogenase (B-specific) inhibitor
0,219	0,153	Aldehyde oxidase inhibitor
0,194	0,128	CYP2B2 substrate
0,128	0,062	Iduronate-2-sulfatase inhibitor
0,124	0,058	Glycoprotein 3-alpha-L-fucosyltransferase inhibitor
0,179	0,114	D-amino-acid dehydrogenase inhibitor
0,126	0,060	D-2-hydroxy-acid dehydrogenase inhibitor
0,143	0,078	Restless leg syndrome treatment
0,183	0,118	Renal tissue kallikrein inhibitor
0,179	0,114	Indolepyruvate C-methyltransferase inhibitor
0,111	0,047	Leucine-tRNA ligase inhibitor
0,147	0,082	Aminopeptidase Y inhibitor
0,127	0,063	N4-(beta-N-acetylglucosaminy)-L-asparaginase inhibitor
0,104	0,039	Phosphoenolpyruvate carboxykinase (diphosphate) inhibitor
0,203	0,139	Calcium channel activator
0,205	0,141	4-Hydroxyphenylacetate 3-monooxygenase inhibitor
0,106	0,042	Monocarboxylic acid transporter 1 inhibitor
0,106	0,042	Monocarboxylic acid transporter inhibitor
0,116	0,052	DNA nucleotidylexotransferase inhibitor
0,083	0,020	ATP diphosphatase inhibitor
0,146	0,083	Plasmanylethanolamine desaturase inhibitor
0,117	0,053	Interleukin 2 antagonist
0,147	0,084	Tryptophan transaminase inhibitor
0,070	0,007	CYP4F8 substrate
0,104	0,042	N-acetylneuraminate lyase inhibitor
0,137	0,074	Antineoplastic (gastric cancer)
0,077	0,014	Sucrose-phosphate phosphatase inhibitor
0,105	0,042	Cysteine transaminase inhibitor

0,172	0,110	Ribonucleoside triphosphate reductase inhibitor
0,091	0,028	CYP2A13 substrate
0,120	0,058	Ribonuclease inhibitor
0,115	0,053	Aspartate-ammonia ligase (ADP-forming) inhibitor
0,129	0,068	Pantoate 4-dehydrogenase inhibitor
0,152	0,091	N-methyl-2-oxoglutaramate hydrolase inhibitor
0,120	0,059	Anabolic
0,120	0,059	L-galactonolactone oxidase inhibitor
0,142	0,081	Ferrochelataze inhibitor
0,093	0,032	Amylo-alpha-1,6-glucosidase inhibitor
0,103	0,043	Galactosylceramide sulfotransferase inhibitor
0,122	0,061	D-lactate dehydrogenase (cytochrome) inhibitor
0,295	0,235	CYP2C8 inhibitor
0,163	0,103	Antinaupathic
0,088	0,028	Peptidoglycan beta-N-acetylmuramidase inhibitor
0,185	0,126	Tankyrase inhibitor
0,098	0,039	Malate dehydrogenase (NADP+) inhibitor
0,084	0,024	Alpha-mannosidase inhibitor
0,125	0,066	Contraceptive
0,119	0,060	CYP3C substrate
0,090	0,031	4a-Hydroxytetrahydrobiopterin dehydratase inhibitor
0,096	0,037	Aspartate-semialdehyde dehydrogenase inhibitor
0,140	0,081	Peptidylamidoglycolate lyase inhibitor
0,125	0,066	Carnitine 3-dehydrogenase inhibitor
0,148	0,089	Cytochrome-b5 reductase substrate
0,101	0,043	Retinol O-fatty-acyltransferase inhibitor
0,116	0,057	Alanine transaminase inhibitor
0,101	0,042	Cellobiose phosphorylase inhibitor
0,175	0,117	Glutaminase inhibitor
0,081	0,022	1-Alkyl-2-acetylgllycerol O-acyltransferase inhibitor
0,189	0,131	Acetylserotonin O-methyltransferase inhibitor
0,086	0,029	Aldose 1-epimerase inhibitor
0,136	0,079	HIV-2 reverse transcriptase inhibitor
0,089	0,032	Steroid sulfotransferase inhibitor
0,118	0,061	Aldehyde dehydrogenase [NAD(P)+] inhibitor
0,112	0,055	Aspartate transaminase inhibitor
0,147	0,090	Benzoylformate decarboxylase inhibitor

0,097	0,040	Ribulose-bisphosphate carboxylase inhibitor
0,116	0,059	Cholate-CoA ligase inhibitor
0,092	0,035	3-Oxoacyl-[acyl-carrier-protein] synthase inhibitor
0,293	0,236	Acute neurologic disorders treatment
0,118	0,062	Aspartate kinase inhibitor
0,115	0,059	Pyrimidine-deoxynucleoside 2'-dioxygenase inhibitor
0,103	0,046	UDP-N-acetylglucosamine diphosphorylase inhibitor
0,102	0,046	5-Oxoprolinase (ATP-hydrolysing) inhibitor
0,155	0,099	3-Demethylubiquinone-9 3-O-methyltransferase inhibitor
0,101	0,045	3-Deoxy-8-phosphooctulonate synthase inhibitor
0,146	0,090	Acetate kinase inhibitor
0,276	0,220	Fibrinolytic
0,110	0,054	UDP-glucose 4-epimerase inhibitor
0,086	0,031	Hydroperoxide dehydratase inhibitor
0,130	0,075	Ethanolaminephosphotransferase inhibitor
0,088	0,033	Aspartate 1-decarboxylase inhibitor
0,145	0,090	Potassium channel intermediate-conductance Ca-activated activator
0,145	0,090	K(Ca) 3.1 channel activator
0,137	0,083	Heat shock protein agonist
0,096	0,042	L-lysine oxidase inhibitor
0,071	0,017	Biotin-[methylmalonyl-CoA-carboxytransferase] ligase inhibitor
0,095	0,041	Necroptosis inhibitor
0,121	0,067	Sulfate adenylyltransferase (ADP) inhibitor
0,087	0,033	Lactate-malate transhydrogenase inhibitor
0,105	0,051	Inositol-polyphosphate 5-phosphatase inhibitor
0,125	0,071	Cathepsin H inhibitor
0,086	0,033	3-Dehydroquinate synthase inhibitor
0,123	0,070	Adenylate cyclase inhibitor
0,090	0,037	Polyamine biosynthesis inhibitor
0,086	0,033	mRNA (guanine-N7-)-methyltransferase inhibitor
0,122	0,069	Glycogen (starch) synthase inhibitor
0,073	0,021	Glucan 1,4-alpha-glucosidase inhibitor
0,208	0,156	3C-like protease (Human coronavirus) inhibitor
0,106	0,054	Tyrosine-protein kinase TYRO 10 inhibitor
0,054	0,002	Prostaglandin EP12 antagonist
0,094	0,042	(R)-aminopropanol dehydrogenase inhibitor
0,090	0,039	Epoxide hydrolase substrate

0,223	0,172	Nicotinate dehydrogenase inhibitor
0,088	0,038	Glutaminyl-tRNA synthase (glutamine-hydrolysing) inhibitor
0,133	0,082	Quinoline-4-carboxylate 2-oxidoreductase inhibitor
0,085	0,035	CYP2C2 substrate
0,070	0,020	Amylosucrase inhibitor
0,201	0,151	Choline-phosphate cytidyltransferase inhibitor
0,116	0,067	Cysteine desulfurase inhibitor
0,106	0,056	tRNA (cytosine-5-)-methyltransferase inhibitor
0,143	0,094	Hydroxymethylbilane synthase inhibitor
0,224	0,174	Antithrombotic
0,207	0,158	Farnesoid X receptor antagonist
0,074	0,024	CYP24 inhibitor
0,100	0,050	D-proline reductase (dithiol) inhibitor
0,174	0,124	Thiol oxidase inhibitor
0,068	0,019	Prostaglandin-I synthase inhibitor
0,108	0,060	Allantoicase inhibitor
0,112	0,064	Glycerol-3-phosphate O-acyltransferase inhibitor
0,075	0,026	Corticotropin releasing factor antagonist
0,094	0,045	Phenylalanine-tRNA ligase inhibitor
0,096	0,047	Squalene-hopene cyclase inhibitor
0,266	0,217	Intermittent claudication treatment
0,091	0,043	2-Methylcitrate synthase inhibitor
0,109	0,061	DNA-3-methyladenine glycosylase II inhibitor
0,098	0,050	Deoxyribonuclease (pyrimidine dimer) inhibitor
0,127	0,079	Sulfur dioxygenase inhibitor
0,058	0,010	Sucrose phosphorylase inhibitor
0,102	0,054	Mannonate dehydratase inhibitor
0,151	0,103	Threonine aldolase inhibitor
0,095	0,047	Saccharopine dehydrogenase (NAD ⁺ , L-glutamate-forming) inhibitor
0,070	0,022	UGT2B19 substrate
0,070	0,022	UGT2B30 substrate
0,070	0,022	UGT2B4E substrate
0,070	0,022	UGT2B4D substrate
0,070	0,022	UGT2B23 substrate
0,134	0,086	(R,R)-butanediol dehydrogenase inhibitor
0,088	0,040	Estrogen agonist
0,092	0,045	[hydroxymethylglutaryl-CoA reductase (NADPH)] kinase inhibitor

0,208	0,160	FMO1 substrate
0,084	0,037	Glycerol kinase inhibitor
0,078	0,032	[acetyl-CoA carboxylase] kinase inhibitor
0,070	0,023	Glucan 1,3-alpha-glucosidase inhibitor
0,052	0,005	Glucocorticoid agonist
0,191	0,144	Trimethylamine dehydrogenase inhibitor
0,171	0,124	Pitrilysin inhibitor
0,288	0,242	Diabetic neuropathy treatment
0,135	0,089	N-Acyl-D-amino-acid deacylase inhibitor
0,185	0,139	L-threonine 3-dehydrogenase inhibitor
0,084	0,038	Beta-glucosidase inhibitor
0,115	0,069	Glutamate release inhibitor
0,137	0,091	3,4-Dihydroxy-9,10-secoandrosta-1,3,5(10)-triene-9,17-dione 4,5-dioxygenase inhibitor
0,084	0,038	4-Hydroxy-4-methyl-2-oxoglutarate aldolase inhibitor
0,064	0,018	D(-)-tartrate dehydratase inhibitor
0,086	0,041	Glycerophosphocholine phosphodiesterase inhibitor
0,126	0,081	Homogentisate 1,2-dioxygenase inhibitor
0,227	0,182	Beta glucuronidase inhibitor
0,082	0,037	3(or 17)alpha-hydroxysteroid dehydrogenase inhibitor
0,089	0,044	Deoxycytidine kinase inhibitor
0,080	0,035	Lactaldehyde dehydrogenase inhibitor
0,238	0,193	CYP3A5 substrate
0,211	0,166	Antiprotozoal (Coccidial)
0,143	0,099	Tyrosine kinase stimulant
0,072	0,029	Acidifying agent gastric
0,080	0,037	ACK1 kinase inhibitor
0,127	0,084	Cysteine synthase inhibitor
0,137	0,094	Pyruvate carboxylase inhibitor
0,136	0,093	(S)-3-hydroxyacid ester dehydrogenase inhibitor
0,150	0,107	Atrolisin A inhibitor
0,129	0,086	Candidapepsin inhibitor
0,090	0,047	2-Oxoaldehyde dehydrogenase (NAD+) inhibitor
0,084	0,041	ATP deaminase inhibitor
0,092	0,049	Scyllo-inosamine-4-phosphate amidinotransferase inhibitor
0,102	0,060	Dihydrouracil oxidase inhibitor
0,110	0,068	Glucose 1-dehydrogenase inhibitor
0,101	0,060	Triose-phosphate isomerase inhibitor

0,085	0,044	Cyanate hydratase inhibitor
0,088	0,047	D-alanine transaminase inhibitor
0,180	0,138	Endopeptidase La inhibitor
0,067	0,025	3'(2'),5'-Bisphosphate nucleotidase inhibitor
0,151	0,110	Cyclopentanone monooxygenase inhibitor
0,103	0,062	Phosphatidate cytidylyltransferase inhibitor
0,124	0,083	Endoglycosylceramidase inhibitor
0,073	0,032	3-Methyl-2-oxobutanoate dehydrogenase (lipoamide) inhibitor
0,105	0,064	Glutamate N-acetyltransferase inhibitor
0,158	0,117	Gastrointestinal motility stimulant
0,093	0,053	UDP-N-acetylglucosamine 2-epimerase inhibitor
0,106	0,065	Site-specific DNA-methyltransferase (adenine-specific) inhibitor
0,070	0,030	Mannosidase inhibitor
0,068	0,028	D-Serine ammonia-lyase inhibitor
0,055	0,015	Tartrate decarboxylase inhibitor
0,154	0,114	CTGF expression inhibitor
0,144	0,105	UGT2B7 substrate
0,086	0,046	Alpha,alpha-trehalose-phosphate synthase (UDP-forming) inhibitor
0,069	0,030	Carbamoyl-serine ammonia-lyase inhibitor
0,101	0,062	Ribitol 2-dehydrogenase inhibitor
0,105	0,067	Adenosylmethionine-8-amino-7-oxononanoate transaminase inhibitor
0,098	0,059	Thiamine-phosphate diphosphorylase inhibitor
0,097	0,058	Glycerol dehydratase inhibitor
0,096	0,057	Benzaldehyde dehydrogenase (NAD+) inhibitor
0,054	0,015	Dichloromethane dehalogenase inhibitor
0,090	0,051	CYP26 substrate
0,094	0,056	Acetoacetate decarboxylase inhibitor
0,061	0,023	Na+ K+ transporting ATPase inhibitor
0,099	0,061	Cytosole dipeptidase inhibitor
0,120	0,082	Choline acetyltransferase stimulant
0,081	0,043	6-Phosphofructo-2-kinase inhibitor
0,128	0,090	Tryptophanyl aminopeptidase inhibitor
0,142	0,104	4-Chlorophenylacetate 3,4-dioxygenase inhibitor
0,168	0,130	Diamine N-acetyltransferase inhibitor
0,126	0,088	3-Hydroxyphenylacetate 6-hydroxylase inhibitor
0,122	0,084	Acylglycerone-phosphate reductase inhibitor
0,132	0,095	Glutamate synthase (ferredoxin) inhibitor

0,061	0,023	CYP17 substrate
0,119	0,082	Xaa-Pro dipeptidyl-peptidase inhibitor
0,096	0,059	Glycine transaminase inhibitor
0,074	0,037	Glutathione reductase (NADPH) stimulant
0,074	0,037	Glutathione reductase stimulant
0,121	0,084	Galactoside O-acetyltransferase inhibitor
0,105	0,069	Squalene epoxidase inhibitor
0,119	0,084	Arylalkyl acylamidase inhibitor
0,107	0,071	Aspartyl aminopeptidase inhibitor
0,150	0,114	Ferredoxin-nitrite reductase inhibitor
0,103	0,068	Malyl-CoA lyase inhibitor
0,100	0,065	Glycerol-3-phosphate dehydrogenase (NAD+) inhibitor
0,101	0,065	Glycoprotein-fucosylgalactoside alpha-N-acetylgalactosaminyltransferase inhibitor
0,110	0,075	Venombin A inhibitor
0,065	0,030	Hydroxylysine kinase inhibitor
0,173	0,138	Hydroxylamine reductase inhibitor
0,096	0,062	Alpha,alpha-trehalase inhibitor
0,081	0,046	Phosphoribulokinase inhibitor
0,061	0,026	CYP24 substrate
0,257	0,223	Mannotetraose 2-alpha-N-acetylglucosaminyltransferase inhibitor
0,061	0,027	Propionate CoA-transferase inhibitor
0,074	0,040	UGT2B7H substrate
0,074	0,040	UGT2B7Y substrate
0,073	0,039	Dextranucrase inhibitor
0,073	0,039	Deoxyhypusine synthase inhibitor
0,079	0,045	3-Dehydroquinate dehydratase inhibitor
0,097	0,064	CMP-N-acetylneuraminate monooxygenase inhibitor
0,128	0,095	Adenylate kinase inhibitor
0,077	0,044	N-acetylglucosaminyldiphosphoundecaprenol N-acetyl-beta-D-mannosaminyltransferase inhibitor
0,087	0,054	Guanidinopropionase inhibitor
0,118	0,085	Acid-sensing ion channel blocker
0,066	0,034	Beta galactosidase inhibitor
0,078	0,045	Dihydrolipoamide S-acetyltransferase inhibitor
0,063	0,031	CMP-KDO synthase inhibitor
0,116	0,084	Creatine kinase inhibitor
0,062	0,030	Biotin-[propionyl-CoA-carboxylase (ATP-hydrolysing)] ligase inhibitor
0,097	0,065	Malate dehydrogenase (oxaloacetate-decarboxylating) inhibitor

0,210	0,178	Pyroglutamyl-peptidase II inhibitor
0,081	0,050	S-methyl-5-thioribose kinase inhibitor
0,132	0,101	TH expression enhancer
0,106	0,075	Adenylate cyclase V inhibitor
0,125	0,094	Procollagen C-endopeptidase inhibitor
0,119	0,088	Cancer procoagulant inhibitor
0,102	0,071	Cerevisin inhibitor
0,203	0,172	CYP4A substrate
0,135	0,104	Acetylspermidine deacetylase inhibitor
0,133	0,103	Tryptophan alpha,beta-oxidase inhibitor
0,062	0,031	Glycine N-choloyltransferase inhibitor
0,075	0,044	L-aminoadipate-semialdehyde dehydrogenase inhibitor
0,164	0,134	Thiopurine S-methyltransferase inhibitor
0,109	0,079	Glucosamine-6-phosphate deaminase inhibitor
0,105	0,074	Decylcitrate synthase inhibitor
0,071	0,041	Alpha 3 adrenoreceptor agonist
0,034	0,004	3-Oxoacyl-[acyl-carrier-protein] synthase II inhibitor
0,069	0,039	UDP-glucose 6-dehydrogenase inhibitor
0,065	0,035	Alpha-1,6-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase inhibitor
0,054	0,025	Anhydrotetracycline monooxygenase inhibitor
0,063	0,033	Deoxyadenosine kinase inhibitor
0,079	0,050	N-acetylglucosamine-6-phosphate deacetylase inhibitor
0,100	0,070	D-Ornithine 4,5-aminomutase inhibitor
0,128	0,099	Lombricine kinase inhibitor
0,101	0,071	Diiodophenylpyruvate reductase inhibitor
0,136	0,107	Tryptophan dimethylallyltransferase inhibitor
0,132	0,102	Gametolysin inhibitor
0,167	0,138	CYP1A2 inducer
0,078	0,049	Carbamoyl-phosphate synthase (ammonia) inhibitor
0,081	0,052	Serine-glyoxylate transaminase inhibitor
0,082	0,054	Neolactotetraosylceramide alpha-2,3-sialyltransferase inhibitor
0,127	0,098	Peptide-tryptophan 2,3-dioxygenase inhibitor
0,113	0,085	Aryl-alcohol dehydrogenase inhibitor
0,114	0,086	3-Isopropylmalate dehydratase inhibitor
0,158	0,130	Mucolytic
0,073	0,045	Glutamate (mGluR8) agonist
0,042	0,014	Homoisocitrate dehydrogenase inhibitor

0,082	0,054	Oligo-1,6-glucosidase inhibitor
0,089	0,061	CTP synthase inhibitor
0,103	0,075	D-cysteine desulfhydrase inhibitor
0,091	0,062	Astringent
0,067	0,039	Methylthioadenosine nucleosidase inhibitor
0,049	0,021	Orotidylate decarboxylase inhibitor
0,103	0,075	Glucosamine-1-phosphate N-acetyltransferase inhibitor
0,074	0,047	Serine-tRNA ligase inhibitor
0,161	0,134	Corticosteroid side-chain-isomerase inhibitor
0,088	0,060	D-malate dehydrogenase (decarboxylating) inhibitor
0,044	0,016	Thymidine phosphorylase inhibitor
0,066	0,039	Quinate 5-dehydrogenase inhibitor
0,112	0,085	Pyruvate dehydrogenase inhibitor
0,060	0,032	Glutamate (mGluR1) agonist
0,040	0,013	Uridine phosphorylase inhibitor
0,082	0,056	Succinate-hydroxymethylglutarate CoA-transferase inhibitor
0,040	0,014	Transaldolase inhibitor
0,070	0,043	Formimidoylglutamase inhibitor
0,066	0,039	Thioether S-methyltransferase inhibitor
0,168	0,142	N-methylhydantoinase (ATP-hydrolysing) inhibitor
0,109	0,083	Phenylacetaldehyde dehydrogenase inhibitor
0,079	0,053	Argininosuccinate lyase inhibitor
0,066	0,040	Phosphoglucomutase inhibitor
0,112	0,086	Acylphosphatase inhibitor
0,119	0,093	Succinic dehydrogenase inhibitor
0,065	0,039	Oxaloacetate tautomerase inhibitor
0,093	0,067	Formaldehyde dehydrogenase inhibitor
0,053	0,027	CYP3A11 substrate
0,048	0,022	Androst-4-ene-3,17-dione monooxygenase inhibitor
0,236	0,211	Antiinflammatory, ophthalmic
0,166	0,141	Diuretic
0,140	0,114	Choline kinase inhibitor
0,071	0,046	Isocitrate dehydrogenase (NADP+) inhibitor
0,075	0,050	Maleate hydratase inhibitor
0,098	0,073	Sarcosine oxidase inhibitor
0,145	0,120	Laxative
0,050	0,025	NADPH oxidoreductase inhibitor

0,136	0,112	Antimutagenic
0,102	0,078	Carboxylesterase inhibitor
0,114	0,089	Lanosterol 14 alpha demethylase inhibitor
0,115	0,090	Polyamine oxidase inhibitor
0,084	0,059	CMP-N-acylneuraminate phosphodiesterase inhibitor
0,088	0,063	Neuropeptide FF agonist
0,088	0,063	Neuropeptide FF2 agonist
0,099	0,075	Aspartate racemase inhibitor
0,192	0,168	CYP2C18 substrate
0,141	0,117	Contraceptive female
0,081	0,057	Muconate cycloisomerase inhibitor
0,097	0,074	2-Nitrophenol 2-monooxygenase inhibitor
0,071	0,048	Carnitine O-octanoyltransferase inhibitor
0,104	0,081	Acetolactate decarboxylase inhibitor
0,217	0,195	Antiprotozoal (Amoeba)
0,083	0,061	Diguanidinobutanase inhibitor
0,122	0,099	Shikimate 5-dehydrogenase inhibitor
0,210	0,188	CYP17 inhibitor
0,179	0,156	Saluretic
0,102	0,080	Dethiobiotin synthase inhibitor
0,115	0,092	FMN reductase inhibitor
0,068	0,046	L-lactate dehydrogenase (cytochrome) inhibitor
0,080	0,058	tRNA (guanine-N2-)-methyltransferase inhibitor
0,108	0,087	Skin whitener
0,192	0,171	Antimetastatic
0,103	0,082	Coagulant
0,120	0,099	Liver X receptor antagonist
0,101	0,080	Serine-phosphoethanolamine synthase inhibitor
0,079	0,058	SULT2A1 substrate
0,092	0,072	Aminoacylase inhibitor
0,089	0,069	Orotate reductase (NADPH) inhibitor
0,185	0,165	Monodehydroascorbate reductase (NADH) inhibitor
0,115	0,095	Beta-cyclopiazonate dehydrogenase inhibitor
0,064	0,044	GMP synthase inhibitor
0,107	0,086	Narcotic antagonist
0,109	0,089	Thiol S-methyltransferase inhibitor
0,171	0,150	TRPA1 agonist

0,128	0,108	Glycerol dehydrogenase (NADP+) inhibitor
0,130	0,110	Phosphatidate phosphatase inhibitor
0,086	0,067	Capillary fragility treatment
0,079	0,059	Cystathionine beta-lyase inhibitor
0,050	0,030	Carboxy-cis,cis-muconate cyclase inhibitor
0,049	0,029	N-acetylglucosaminyldiphosphodolichol N-acetylglucosaminyltransferase inhibitor
0,153	0,133	Fibromyalgia syndrome treatment
0,025	0,006	Calcineurin inhibitor
0,183	0,164	Antineoplastic (brain cancer)
0,096	0,077	Aryl-aldehyde dehydrogenase (NADP+) inhibitor
0,039	0,020	Membrane-oligosaccharide glycerophosphotransferase inhibitor
0,106	0,087	Beta lactamase inhibitor
0,093	0,074	Glutamate (mGluR6) antagonist
0,084	0,066	Diaminopropionate ammonia-lyase inhibitor
0,131	0,113	Quisqualate antagonist
0,041	0,023	Phosphoglycerate phosphatase inhibitor
0,077	0,059	[myelin basic protein]-arginine N-methyltransferase inhibitor
0,063	0,045	Beta-1,4-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase inhibitor
0,073	0,055	Aminolevulinate transaminase inhibitor
0,058	0,040	Plus-end-directed kinesin ATPase inhibitor
0,076	0,059	Cushing's syndrome treatment
0,045	0,028	Thymidine-triphosphatase inhibitor
0,077	0,060	Anticholelithogenic
0,092	0,075	Ornithine-oxo-acid transaminase inhibitor
0,024	0,008	Gestagen-like
0,118	0,102	Tardive dyskinesia treatment
0,096	0,080	Lysyl endopeptidase inhibitor
0,097	0,081	Adenine deaminase inhibitor
0,115	0,099	Acetyl-CoA C-acyltransferase inhibitor
0,176	0,160	Antiprotozoal (Trichomonas)
0,050	0,034	Glutamate uptake inhibitor
0,122	0,106	Corticosteroid antagonist
0,070	0,054	Propanediol dehydratase inhibitor
0,119	0,103	Guanidinoacetate N-methyltransferase inhibitor
0,082	0,067	Nucleotide diphosphatase inhibitor
0,061	0,045	Malate synthase inhibitor
0,160	0,145	Severe acute respiratory syndrome treatment

0,042	0,026	Adenylate cyclase I inhibitor
0,104	0,089	Malate-CoA ligase inhibitor
0,037	0,022	Glucose-6-phosphate isomerase inhibitor
0,104	0,090	Lysine 2-monooxygenase inhibitor
0,169	0,155	Dactylisin inhibitor
0,225	0,211	Cancer associated disorders treatment
0,101	0,087	Adenylyl-sulfate kinase inhibitor
0,105	0,091	Heat shock protein 70 agonist
0,030	0,016	Alpha glucosidase I inhibitor
0,126	0,112	Tryptophanamidase inhibitor
0,038	0,024	Endo-beta-N-acetylglucosaminidase inhibitor
0,107	0,094	Inositol 1,4,5-trisphosphate 3-kinase inhibitor
0,103	0,089	Cysteine-S-conjugate beta-lyase inhibitor
0,114	0,101	Isoquinoline 1-oxidoreductase inhibitor
0,117	0,104	UGT2B15 substrate
0,080	0,066	Haloalkane dehalogenase inhibitor
0,172	0,159	5 Hydroxytryptamine 2B agonist
0,044	0,031	Glutamate (mGluR group II) agonist
0,137	0,124	Aryl hydrocarbon receptor agonist
0,076	0,064	Carboxylate reductase inhibitor
0,061	0,048	Hydroxyquinol 1,2-dioxygenase inhibitor
0,100	0,087	Arginine deiminase inhibitor
0,059	0,047	Asparagine-oxo-acid transaminase inhibitor
0,178	0,165	Antitoxic
0,042	0,030	Glutamate (mGluR2) agonist
0,043	0,031	2-Ethylmalate synthase inhibitor
0,119	0,107	Phenol 2-monooxygenase inhibitor
0,030	0,018	Phosphopyruvate hydratase inhibitor
0,094	0,082	Sulfate adenylyltransferase inhibitor
0,066	0,054	Cellulose synthase (UDP-forming) inhibitor
0,086	0,074	Agaritine gamma-glutamyltransferase inhibitor
0,078	0,067	Threonine ammonia-lyase inhibitor
0,092	0,081	Putrescine oxidase inhibitor
0,053	0,042	Sucrose alpha-glucosidase inhibitor
0,064	0,053	Nicotinic receptor alpha7 subunit antagonist
0,094	0,083	Xanthommatin reductase inhibitor
0,038	0,027	Isopentenyl-diphosphate DELTA-isomerase inhibitor

0,048	0,037	Nucleoside deoxyribosyltransferase inhibitor
0,041	0,030	Methylaspartate mutase inhibitor
0,050	0,039	Aspartate ammonia-lyase inhibitor
0,122	0,112	Tripeptidyl-peptidase I inhibitor
0,116	0,105	Dolichyl-phosphate beta-D-mannosyltransferase inhibitor
0,126	0,116	Oxalate oxidase inhibitor
0,131	0,121	Arylamine N-acetyltransferase inhibitor
0,087	0,077	Isocitrate dehydrogenase (NAD+) inhibitor
0,126	0,116	Nucleoside-diphosphatase inhibitor
0,150	0,139	Histone acetyltransferase inhibitor
0,038	0,027	Glucosylceramidase inhibitor
0,163	0,153	1-Alkylglycerophosphocholine O-acetyltransferase inhibitor
0,205	0,195	Immunosuppressant
0,055	0,045	1-Phosphofructokinase inhibitor
0,053	0,043	Assemblin inhibitor
0,052	0,043	Protein N-acetylglucosaminyltransferase inhibitor
0,083	0,073	Acyloxyacyl hydrolase inhibitor
0,066	0,057	Sphingosine kinase inhibitor
0,018	0,009	Antiprotozoal activity enhancer
0,074	0,065	Isocitrate lyase inhibitor
0,075	0,066	[acyl-carrier-protein] S-malonyltransferase inhibitor
0,078	0,069	UDP-N-acetylglucosamine 1-carboxyvinyltransferase inhibitor
0,056	0,047	Altronate dehydratase inhibitor
0,138	0,129	CYP1B substrate
0,048	0,040	Tubulin GTPase inhibitor
0,080	0,072	Interleukin 1a antagonist
0,064	0,056	Betaine-aldehyde dehydrogenase inhibitor
0,043	0,035	Glucose-1-phosphate adenyltransferase inhibitor
0,118	0,110	Bacterial efflux pump inhibitor
0,088	0,080	Phosphoserine phosphatase inhibitor
0,016	0,008	Kanamycin kinase inhibitor
0,072	0,064	Scytalone dehydratase inhibitor
0,049	0,041	D-Alanine-poly(phosphoribitol) ligase inhibitor
0,042	0,034	Fructose 5-dehydrogenase (NADP+) inhibitor
0,026	0,018	Tartrate dehydrogenase inhibitor
0,095	0,087	Pyridoxine 5-dehydrogenase inhibitor
0,039	0,032	Glucose-1-phosphatase inhibitor

0,025	0,017	Corticosteroid-like
0,108	0,101	Saccharopine dehydrogenase (NADP+, L-glutamate-forming) inhibitor
0,022	0,015	Cortisone alpha-reductase inhibitor
0,090	0,083	Glutamine-tRNA ligase inhibitor
0,047	0,040	AMP nucleosidase inhibitor
0,179	0,172	Phospholipase C inhibitor
0,070	0,063	4-Pyridoxolactonase inhibitor
0,149	0,142	Beta-carotene 15,15'-monooxygenase inhibitor
0,068	0,061	1-Pyrroline-5-carboxylate dehydrogenase inhibitor
0,050	0,043	Chalcone isomerase inhibitor
0,106	0,100	Cholesterol synthesis inhibitor
0,123	0,117	Hypoxia inducible factor 1 alpha inhibitor
0,069	0,063	Thiosulfate sulfurtransferase inhibitor
0,050	0,044	Pyruvate, water dikinase inhibitor
0,119	0,113	N-Carbamoyl-D-amino acid hydrolase inhibitor
0,124	0,118	L-glucuronate reductase inhibitor
0,111	0,106	Acylaminoacyl-peptidase inhibitor
0,038	0,033	Strombine dehydrogenase inhibitor
0,037	0,031	GABA B receptor antagonist
0,079	0,074	CYP2B4 substrate
0,128	0,123	Envelysin inhibitor
0,049	0,044	Uracil phosphoribosyltransferase inhibitor
0,095	0,090	Estrone sulfotransferase inhibitor
0,043	0,038	Polyphosphate kinase inhibitor
0,104	0,099	Prolactin inhibitor
0,129	0,125	Glucuronate isomerase inhibitor
0,087	0,083	Chloramphenicol O-acetyltransferase inhibitor
0,043	0,038	Pregnane X receptor antagonist
0,108	0,104	Aldehyde dehydrogenase (NAD+) inhibitor
0,033	0,029	Ribose-5-phosphate adenylyltransferase inhibitor
0,065	0,061	Phosphoglycolate phosphatase inhibitor
0,073	0,069	Carboxypeptidase M inhibitor
0,033	0,029	RNA agonist
0,024	0,020	Dolichyldiphosphatase inhibitor
0,096	0,092	Asparaginase inhibitor
0,022	0,018	Dopamine D2B antagonist
0,032	0,029	Diphosphate-serine phosphotransferase inhibitor

0,097	0,094	Alkanal monooxygenase (FMN-linked) inhibitor
0,016	0,013	CYP11B1 substrate
0,021	0,019	CYP27A substrate
0,034	0,032	Phosphoserine transaminase inhibitor
0,053	0,050	Aryl hydrocarbon receptor antagonist
0,111	0,109	Diphosphomevalonate decarboxylase inhibitor
0,036	0,034	[Isocitrate dehydrogenase (NADP+)] kinase inhibitor
0,037	0,035	Sodium-dependent vitamin C transporter 2 inhibitor
0,074	0,072	Alcohol oxidase inhibitor
0,167	0,166	Diabetic nephropathy treatment
0,098	0,096	Deoxycytidylate 5-hydroxymethyltransferase inhibitor
0,058	0,056	Citrate (Si)-synthase inhibitor
0,143	0,142	Histidinol-phosphatase inhibitor
0,022	0,020	Sigma 3 receptor antagonist
0,027	0,025	Glutamate (mGluR1a) agonist
0,027	0,025	Glutamate (mGluR5a) agonist
0,058	0,057	Fumarylacetoacetase inhibitor
0,060	0,059	3-Hydroxydecanoyl-[acyl-carrier-protein] dehydratase inhibitor
0,058	0,058	NMN nucleosidase inhibitor
0,044	0,044	Mannosyl-oligosaccharide glucosidase inhibitor

Complex 4 All

☒ All
 ☐ Pa>Pi
 ☐ Pa>0,3
 ☐ Pa>0,7

Pa	Pi	Activity
0,799	0,034	Phobic disorders treatment
0,731	0,003	Antineoplastic (non-Hodgkin's lymphoma)
0,733	0,008	Phosphatase inhibitor
0,752	0,038	Testosterone 17beta-dehydrogenase (NADP+) inhibitor
0,733	0,025	Nicotinic alpha6beta3beta4alpha5 receptor antagonist
0,731	0,036	Chymosin inhibitor
0,731	0,036	Acrocyllindropepsin inhibitor
0,731	0,036	Saccharopepsin inhibitor
0,693	0,009	Antiasthmatic

0,692	0,010	Glucan 1,4-alpha-maltotriohydrolase inhibitor
0,692	0,024	5-O-(4-coumaroyl)-D-quinic acid 3'-monooxygenase inhibitor
0,667	0,033	Nicotinic alpha2beta2 receptor antagonist
0,663	0,041	Sugar-phosphatase inhibitor
0,654	0,033	Acylcarnitine hydrolase inhibitor
0,647	0,027	Alkylacetylglucophosphatase inhibitor
0,613	0,038	Ribulose-phosphate 3-epimerase inhibitor
0,579	0,016	Antipruritic, allergic
0,644	0,082	Aspulvinone dimethylallyltransferase inhibitor
0,567	0,013	Dolichyl-diphosphooligosaccharide-protein glycotransferase inhibitor
0,628	0,076	CYP2J substrate
0,554	0,009	Imidazoline receptor agonist
0,580	0,043	Antidyskinetic
0,604	0,067	Polyporopepsin inhibitor
0,581	0,060	Glutamyl endopeptidase II inhibitor
0,538	0,027	Antipruritic
0,545	0,038	27-Hydroxycholesterol 7alpha-monooxygenase inhibitor
0,519	0,015	Rhinitis treatment
0,528	0,024	Mannan endo-1,4-beta-mannosidase inhibitor
0,558	0,055	Antineoplastic
0,606	0,105	Ubiquinol-cytochrome-c reductase inhibitor
0,520	0,026	CYP2A4 substrate
0,568	0,074	CYP2J2 substrate
0,503	0,010	Antidiabetic (type 2)
0,536	0,055	Alkenylglycerophosphocholine hydrolase inhibitor
0,536	0,057	Complement factor D inhibitor
0,498	0,028	Antiallergic
0,479	0,011	RNA directed DNA polymerase inhibitor
0,529	0,061	NADPH peroxidase inhibitor
0,523	0,057	Platelet aggregation stimulant
0,494	0,033	Dermatologic
0,470	0,011	DNA polymerase I inhibitor
0,478	0,020	Dementia treatment
0,504	0,051	Chloride peroxidase inhibitor
0,467	0,026	Membrane permeability enhancer
0,502	0,064	Macrophage colony stimulating factor agonist
0,493	0,059	UDP-N-acetylglucosamine 4-epimerase inhibitor

0,492	0,060	Glucan endo-1,3-beta-D-glucosidase inhibitor
0,469	0,037	Acetylsterase inhibitor
0,465	0,034	Glyoxylate reductase inhibitor
0,441	0,010	Antiviral (Hepatitis B)
0,455	0,025	Albendazole monooxygenase inhibitor
0,479	0,054	Pterin deaminase inhibitor
0,434	0,014	Imidazoline I1 receptor agonist
0,480	0,063	Limulus clotting factor B inhibitor
0,474	0,058	Glucan endo-1,6-beta-glucosidase inhibitor
0,449	0,034	Peptidoglycan glycosyltransferase inhibitor
0,456	0,041	CYP2B5 substrate
0,423	0,011	Antipruritic, non-allergic
0,457	0,044	Antiviral (Rhinovirus)
0,422	0,011	Opioid dependency treatment
0,437	0,026	Cutinase inhibitor
0,470	0,061	Phosphatidylcholine-retinol O-acyltransferase inhibitor
0,455	0,047	L-glutamate oxidase inhibitor
0,484	0,079	Platelet adhesion inhibitor
0,476	0,075	Electron-transferring-flavoprotein dehydrogenase inhibitor
0,404	0,011	Chronic obstructive pulmonary disease treatment
0,434	0,042	All-trans-retinyl-palmitate hydrolase inhibitor
0,448	0,057	Cyclic AMP agonist
0,447	0,056	Feruloyl esterase inhibitor
0,454	0,063	1,4-Lactonase inhibitor
0,461	0,070	Carboxypeptidase Taq inhibitor
0,430	0,039	Pullulanase inhibitor
0,444	0,055	Exoribonuclease II inhibitor
0,417	0,028	Phosphatidylinositol diacylglycerol-lyase inhibitor
0,474	0,089	Omptin inhibitor
0,398	0,013	Endo-1,3(4)-beta-glucanase inhibitor
0,435	0,051	Apyrase inhibitor
0,460	0,076	Lysase inhibitor
0,405	0,021	Prostate cancer treatment
0,440	0,060	Hydrogen dehydrogenase inhibitor
0,485	0,105	Glycosylphosphatidylinositol phospholipase D inhibitor
0,486	0,107	Kidney function stimulant
0,437	0,061	Trimethylamine-oxide aldolase inhibitor

0,432	0,058	CYP3A5 substrate
0,446	0,074	Venombin AB inhibitor
0,417	0,045	Simian immunodeficiency virus proteinase inhibitor
0,441	0,071	JAK2 expression inhibitor
0,420	0,056	Gluconate 5-dehydrogenase inhibitor
0,385	0,024	Oxidizing agent
0,418	0,058	CYP2D15 substrate
0,415	0,059	3-Hydroxybenzoate 6-monooxygenase inhibitor
0,357	0,002	Glucocorticoid agonist
0,391	0,040	Antiviral (Herpes)
0,364	0,014	Vascular dementia treatment
0,376	0,028	Sorbitol-6-phosphate 2-dehydrogenase inhibitor
0,394	0,046	Malate oxidase inhibitor
0,379	0,031	Taurine-2-oxoglutarate transaminase inhibitor
0,411	0,063	Immunosuppressant
0,496	0,151	Membrane permeability inhibitor
0,459	0,115	Fusarinine-C ornithinesterase inhibitor
0,401	0,057	Alkenylglycerophosphoethanolamine hydrolase inhibitor
0,373	0,030	Xylan endo-1,3-beta-xylosidase inhibitor
0,402	0,060	Acetylgalactosaminyl-O-glycosyl-glycoprotein beta-1,3-N-acetylglucosaminyltransferase inhibitor
0,426	0,089	Alopecia treatment
0,401	0,064	Adenomatous polyposis treatment
0,386	0,049	Aspergillopepsin I inhibitor
0,455	0,120	Pseudolysin inhibitor
0,362	0,028	CDP-diacylglycerol-glycerol-3-phosphate 3-phosphatidyltransferase inhibitor
0,393	0,060	Na ⁺ -transporting two-sector ATPase inhibitor
0,347	0,014	Systemic lupus erythematosus treatment
0,421	0,091	Thioredoxin inhibitor
0,369	0,040	Glucan 1,4-alpha-maltotetraohydrolase inhibitor
0,366	0,038	Glycolate dehydrogenase inhibitor
0,367	0,039	Poly(beta-D-mannuronate) lyase inhibitor
0,356	0,033	Shikimate O-hydroxycinnamoyltransferase inhibitor
0,380	0,057	GABA aminotransferase inhibitor
0,331	0,010	Alpha-pinene-oxide decyclase inhibitor
0,382	0,063	N-acetylneuraminate 7-O(or 9-O)-acetyltransferase inhibitor
0,347	0,030	Antiinflammatory, ophthalmic
0,334	0,019	Maltose-transporting ATPase inhibitor

0,393	0,078	Fatty-acyl-CoA synthase inhibitor
0,357	0,043	Cardiovascular analeptic
0,400	0,086	Lysine 2,3-aminomutase inhibitor
0,352	0,037	Clavamate synthase inhibitor
0,426	0,112	Phthalate 4,5-dioxygenase inhibitor
0,381	0,068	Formaldehyde transketolase inhibitor
0,391	0,079	Fragilysin inhibitor
0,402	0,091	Neurotransmitter antagonist
0,429	0,120	Acetylcholine neuromuscular blocking agent
0,333	0,029	Sclerosant
0,349	0,047	Undecaprenyldiphospho-muramoylpentapeptide beta-N-acetylglucosaminyltransferase inhibitor
0,353	0,051	CYP7 inhibitor
0,329	0,028	Galactolipase inhibitor
0,338	0,037	Yeast ribonuclease inhibitor
0,306	0,005	Alternansucrase inhibitor
0,351	0,050	Mannose isomerase inhibitor
0,385	0,085	Vasoprotector
0,407	0,108	Phospholipid-translocating ATPase inhibitor
0,411	0,113	Ovulation inhibitor
0,352	0,054	H ⁺ -transporting two-sector ATPase inhibitor
0,381	0,084	CYP2D16 substrate
0,304	0,009	Allergic rhinitis treatment
0,344	0,049	2-Haloacid dehalogenase inhibitor
0,338	0,044	CYP2B11 substrate
0,411	0,117	Protein-disulfide reductase (glutathione) inhibitor
0,340	0,047	Cyclomaltodextrinase inhibitor
0,374	0,081	Dehydro-L-gulonate decarboxylase inhibitor
0,314	0,022	Undecaprenyl-diphosphatase inhibitor
0,336	0,045	Fructan beta-fructosidase inhibitor
0,325	0,037	GST M substrate
0,297	0,011	GST T substrate
0,297	0,011	GST T1-1 substrate
0,315	0,029	Styrene-oxide isomerase inhibitor
0,357	0,071	Cyclohexanone monooxygenase inhibitor
0,398	0,113	NADPH-cytochrome-c2 reductase inhibitor
0,353	0,068	Mucinaminyserine mucinaminidase inhibitor
0,359	0,074	EIF4E expression inhibitor

0,315	0,031	Phosphoenolpyruvate mutase inhibitor
0,345	0,061	Limulus clotting factor C inhibitor
0,341	0,058	Nitrite reductase (NO-forming) inhibitor
0,383	0,101	Erythropoiesis stimulant
0,327	0,046	H ⁺ -exporting ATPase inhibitor
0,356	0,076	Thymidylate 5'-phosphatase inhibitor
0,337	0,059	IgA-specific serine endopeptidase inhibitor
0,331	0,053	Sulfite oxidase inhibitor
0,294	0,017	Ligase inhibitor
0,315	0,038	Pediculicide
0,381	0,105	Leukopoiesis stimulant
0,298	0,021	Hydroxysteroid dehydrogenase inhibitor
0,308	0,036	D-alanine 2-hydroxymethyltransferase inhibitor
0,336	0,064	Steroid N-acetylglucosaminyltransferase inhibitor
0,369	0,099	GST A substrate
0,305	0,036	Pseudouridylate synthase inhibitor
0,338	0,068	CYP2D2 inhibitor
0,334	0,067	RELA expression inhibitor
0,352	0,085	Polyamine-transporting ATPase inhibitor
0,359	0,094	Arginine 2-monooxygenase inhibitor
0,297	0,032	Fumarate reductase (NADH) inhibitor
0,354	0,090	G-protein-coupled receptor kinase inhibitor
0,354	0,090	Beta-adrenergic receptor kinase inhibitor
0,346	0,082	Phenol O-methyltransferase inhibitor
0,318	0,055	Hematopoietic inhibitor
0,311	0,050	Glyoxylate oxidase inhibitor
0,310	0,050	DNA synthesis inhibitor
0,326	0,067	Phosphopantothenoilcysteine decarboxylase inhibitor
0,400	0,140	CYP3A2 substrate
0,387	0,128	5 Hydroxytryptamine uptake stimulant
0,308	0,049	CYP2B10 substrate
0,293	0,034	Antineoplastic (small cell lung cancer)
0,264	0,007	Endometriosis treatment
0,364	0,107	(R)-6-hydroxynicotine oxidase inhibitor
0,264	0,007	Arachidonic acid antagonist
0,260	0,004	Cyclin-dependent kinase 7 inhibitor
0,290	0,033	Licheninase inhibitor

0,396	0,141	Membrane integrity agonist
0,352	0,097	Ecdysone 20-monooxygenase inhibitor
0,300	0,046	Steroid synthesis inhibitor
0,324	0,070	Antidiabetic
0,312	0,058	Dextranase inhibitor
0,261	0,008	Glucan 1,3-beta-glucosidase inhibitor
0,319	0,066	Opioid kappa 3 receptor antagonist
0,278	0,025	Antimycoplasmal
0,289	0,037	Dopamine release stimulant
0,355	0,104	4-Nitrophenol 2-monooxygenase inhibitor
0,322	0,071	Peptide-N4-(N-acetyl-beta-glucosaminy)asparagine amidase inhibitor
0,334	0,083	(S)-6-hydroxynicotine oxidase inhibitor
0,320	0,069	N-formylmethionyl-peptidase inhibitor
0,297	0,047	Carminative
0,343	0,093	Aspartate-phenylpyruvate transaminase inhibitor
0,354	0,104	Fibrolase inhibitor
0,297	0,048	2,3,4,5-Tetrahydropyridine-2,6-dicarboxylate N-succinyltransferase inhibitor
0,369	0,121	CYP2C12 substrate
0,304	0,056	Antineoplastic (pancreatic cancer)
0,363	0,116	Aminobutyraldehyde dehydrogenase inhibitor
0,341	0,095	Cl--transporting ATPase inhibitor
0,341	0,096	Caspase 8 stimulant
0,321	0,077	Phosphoinositide 5-phosphatase inhibitor
0,294	0,051	Quinoprotein glucose dehydrogenase inhibitor
0,300	0,057	DELTA14-sterol reductase inhibitor
0,345	0,103	Dimethylargininase inhibitor
0,276	0,035	Bisphosphoglycerate mutase inhibitor
0,318	0,081	Prostaglandin-A1 DELTA-isomerase inhibitor
0,334	0,097	Glycerol-3-phosphate oxidase inhibitor
0,356	0,119	Antiinflammatory
0,329	0,094	Manganese peroxidase inhibitor
0,288	0,054	Hyaluronic acid agonist
0,369	0,137	Antiviral (Picornavirus)
0,255	0,023	GABA B receptor agonist
0,334	0,103	Antimyopathies
0,323	0,093	Histidine N-acetyltransferase inhibitor
0,307	0,078	Creatininase inhibitor

0,274	0,046	Alpha-N-acetylglucosaminidase inhibitor
0,271	0,043	Alkylglycerophosphoethanolamine phosphodiesterase inhibitor
0,281	0,054	Adrenaline release stimulant
0,330	0,104	CYP4A11 substrate
0,252	0,027	2-Dehydropantoate aldolase inhibitor
0,300	0,075	tRNA-pseudouridine synthase I inhibitor
0,273	0,049	Oryzin inhibitor
0,267	0,045	Myeloblastin inhibitor
0,235	0,013	N-acetylneuraminate lyase inhibitor
0,297	0,076	Lysostaphin inhibitor
0,286	0,065	RNA synthesis inhibitor
0,292	0,072	Arylmalonate decarboxylase inhibitor
0,301	0,081	Antimetastatic
0,316	0,096	CYP2A8 substrate
0,244	0,025	Deoxyribonuclease I inhibitor
0,301	0,082	3-Cyanoalanine hydratase inhibitor
0,320	0,102	Sphinganine kinase inhibitor
0,396	0,178	Calcium channel (voltage-sensitive) activator
0,281	0,064	NF-E2-related factor 2 stimulant
0,300	0,084	Alcohol dehydrogenase (acceptor) inhibitor
0,314	0,098	Tpr proteinase (<i>Porphyromonas gingivalis</i>) inhibitor
0,340	0,125	Histamine release stimulant
0,276	0,061	CYP2A2 substrate
0,311	0,096	Pro-opiomelanocortin converting enzyme inhibitor
0,285	0,070	Hydroxylamine reductase (NADH) inhibitor
0,222	0,008	4-Carboxymethyl-4-methylbutenolide mutase inhibitor
0,258	0,044	Polyneuridine-aldehyde esterase inhibitor
0,340	0,128	Pin1 inhibitor
0,246	0,035	Alpha-glucuronidase inhibitor
0,236	0,025	Galacturan 1,4-alpha-galacturonidase inhibitor
0,246	0,035	Tropinesterase inhibitor
0,224	0,014	Aconitate decarboxylase inhibitor
0,271	0,061	Linoleoyl-CoA desaturase inhibitor
0,345	0,136	Cytoprotectant
0,241	0,034	Ribonucleoside triphosphate reductase inhibitor
0,259	0,052	Protein-Npi-phosphohistidine-sugar phosphotransferase inhibitor
0,351	0,145	Antinociceptive

0,243	0,037	Rhizopuspepsin inhibitor
0,256	0,050	N-Acyl-D-aspartate deacylase inhibitor
0,215	0,009	Keratosis actinic (solar) treatment
0,325	0,123	CYP3A1 substrate
0,284	0,083	Glutamine-phenylpyruvate transaminase inhibitor
0,257	0,056	Aspergillopepsin II inhibitor
0,227	0,027	2,2-Dialkylglycine decarboxylase (pyruvate) inhibitor
0,221	0,020	DNA nucleotidyltransferase inhibitor
0,331	0,131	2-Dehydropantoate 2-reductase inhibitor
0,314	0,116	Linoleate diol synthase inhibitor
0,287	0,088	3-Phytase inhibitor
0,257	0,059	Aldosterone antagonist
0,294	0,097	Methylamine-glutamate N-methyltransferase inhibitor
0,288	0,090	Adenylyl-sulfate reductase inhibitor
0,246	0,048	Poly(alpha-L-guluronate) lyase inhibitor
0,282	0,085	Chitosanase inhibitor
0,322	0,125	Rubredoxin-NAD ⁺ reductase inhibitor
0,309	0,113	Centromere associated protein inhibitor
0,251	0,056	Horrisin inhibitor
0,271	0,076	2-Hydroxymuconate-semialdehyde hydrolase inhibitor
0,232	0,039	1,4-Alpha-glucan branching enzyme inhibitor
0,212	0,019	Trehalose-phosphatase inhibitor
0,302	0,109	Glucose oxidase inhibitor
0,250	0,058	UGT2B28 substrate
0,282	0,090	ADP-thymidine kinase inhibitor
0,279	0,087	N-acylmannosamine kinase inhibitor
0,286	0,094	Chenodeoxycholytaurine hydrolase inhibitor
0,249	0,058	Chaperonin ATPase inhibitor
0,267	0,077	CYP2C29 substrate
0,260	0,071	Dipeptidase E inhibitor
0,271	0,082	Cytostatic
0,252	0,063	Antiprotozoal (Trichomonas)
0,238	0,051	Vitamin-K-epoxide reductase (warfarin-insensitive) inhibitor
0,270	0,083	Glutamate-tRNA ligase inhibitor
0,208	0,021	Alpha-N-acetylgalactosaminidase inhibitor
0,275	0,089	D-lactaldehyde dehydrogenase inhibitor
0,282	0,097	CYP2F1 substrate

0,283	0,099	Fucoesterol-epoxide lyase inhibitor
0,296	0,112	Sulfite dehydrogenase inhibitor
0,304	0,120	S-formylglutathione hydrolase inhibitor
0,343	0,159	Thromboxane B2 antagonist
0,234	0,051	Anthranilate-CoA ligase inhibitor
0,245	0,062	Antineoplastic (brain cancer)
0,237	0,055	N-acetyllactosaminide beta-1,3-N-acetylglucosaminyltransferase inhibitor
0,190	0,008	Inositol-3-phosphate synthase inhibitor
0,241	0,059	2-Oxoaldehyde dehydrogenase (NADP+) inhibitor
0,260	0,078	Long-chain-aldehyde dehydrogenase inhibitor
0,247	0,065	Levanase inhibitor
0,196	0,015	CYP3A5 inducer
0,275	0,094	Lysyl oxidase inhibitor
0,241	0,060	2-Hydroxy-3-oxoadipate synthase inhibitor
0,263	0,083	MAP kinase kinase 4 inhibitor
0,304	0,124	Biotinidase inhibitor
0,215	0,035	BRAF expression inhibitor
0,223	0,045	NAD+ synthase (glutamine-hydrolysing) inhibitor
0,187	0,008	Tardive dyskinesia treatment
0,219	0,040	3-Chloro-D-alanine dehydrochlorinase inhibitor
0,224	0,045	D-xylulose reductase inhibitor
0,279	0,100	Antisecretoric
0,233	0,054	Mannitol-1-phosphatase inhibitor
0,267	0,089	Peptide alpha-N-acetyltransferase inhibitor
0,229	0,052	Dynein ATPase inhibitor
0,203	0,026	Riboflavin phosphotransferase inhibitor
0,245	0,068	Benzaldehyde dehydrogenase (NADP+) inhibitor
0,269	0,093	Isopenicillin-N epimerase inhibitor
0,241	0,065	Flavin-containing monooxygenase inhibitor
0,232	0,057	Cellulose 1,4-beta-cellobiosidase inhibitor
0,255	0,081	Transketolase inhibitor
0,211	0,038	Alkene monooxygenase inhibitor
0,247	0,074	Salicylate 1-monooxygenase inhibitor
0,206	0,033	Ferredoxin-NADP+ reductase inhibitor
0,301	0,128	CYP2C9 inducer
0,233	0,061	3-Methylbutanal reductase inhibitor
0,182	0,010	Amylo-alpha-1,6-glucosidase inhibitor

0,246	0,075	Gluconolactonase inhibitor
0,291	0,120	Membrane integrity antagonist
0,241	0,071	Bisphosphoglycerate phosphatase inhibitor
0,232	0,062	Glutarate-semialdehyde dehydrogenase inhibitor
0,266	0,096	Antipsoriatic
0,220	0,051	Aureolysin inhibitor
0,290	0,121	Hydroxylamine oxidase inhibitor
0,305	0,137	CYP2A1 substrate
0,231	0,063	Alpha-1,6-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase inhibitor
0,247	0,079	NADH kinase inhibitor
0,274	0,107	Plastoquinol-plastocyanin reductase inhibitor
0,228	0,061	Prunasin beta-glucosidase inhibitor
0,195	0,029	Estradiol 17alpha-dehydrogenase inhibitor
0,249	0,084	Glycerol-3-phosphate dehydrogenase inhibitor
0,249	0,084	Endothelial growth factor antagonist
0,261	0,097	CYP2A5 substrate
0,226	0,062	Cyclooxygenase substrate
0,232	0,069	N-hydroxy-2-acetamidofluorene reductase inhibitor
0,222	0,059	Polygalacturonase inhibitor
0,204	0,041	Glycerol-1-phosphatase inhibitor
0,167	0,004	Inositol 1,4,5-triphosphate receptor antagonist
0,206	0,043	Cycloartenol synthase inhibitor
0,187	0,025	Interferon antagonist
0,200	0,038	CYP2B18 substrate
0,268	0,106	Chitinase inhibitor
0,240	0,078	Ethanolamine-phosphate cytidyltransferase inhibitor
0,201	0,040	Antineoplastic (renal cancer)
0,230	0,068	Pappalysin-1 inhibitor
0,263	0,102	P-benzoquinone reductase (NADPH) inhibitor
0,305	0,144	Pancreatic elastase inhibitor
0,208	0,048	Inulinase inhibitor
0,281	0,122	Cyanoalanine nitrilase inhibitor
0,179	0,020	Isoamylase inhibitor
0,268	0,109	Peptidyl-dipeptidase Dcp inhibitor
0,210	0,051	Aryldialkylphosphatase inhibitor
0,181	0,023	Interferon gamma antagonist
0,279	0,122	(R)-Pantolactone dehydrogenase (flavin) inhibitor

0,193	0,037	Glucan 1,6-alpha-glucosidase inhibitor
0,189	0,033	Carnitine dehydratase inhibitor
0,305	0,150	Chlordecone reductase inhibitor
0,201	0,046	Bile-salt sulfotransferase inhibitor
0,205	0,051	Lactaldehyde reductase inhibitor
0,244	0,090	Hepatoprotectant
0,275	0,120	MMP9 expression inhibitor
0,278	0,124	5 Hydroxytryptamine release stimulant
0,281	0,127	Leukopoiesis inhibitor
0,208	0,055	Snalysin inhibitor
0,194	0,040	Allantoate deiminase inhibitor
0,192	0,040	Antineoplastic (ovarian cancer)
0,217	0,065	Glycine dehydrogenase (decarboxylating) inhibitor
0,198	0,046	Aspartate-tRNA ligase inhibitor
0,210	0,058	(S)-3-amino-2-methylpropionate transaminase inhibitor
0,153	0,002	Lipocortins synthesis agonist
0,234	0,083	S-alkylcysteine lyase inhibitor
0,209	0,059	Sedoheptulose-bisphosphatase inhibitor
0,201	0,051	Glucan 1,4-beta-glucosidase inhibitor
0,286	0,137	Cytochrome P450 stimulant
0,198	0,049	2-Haloacid dehalogenase (configuration-inverting) inhibitor
0,188	0,039	L-iduronidase inhibitor
0,244	0,095	Aspergillus nuclease S1 inhibitor
0,216	0,067	GABA C receptor agonist
0,285	0,136	Malate dehydrogenase (acceptor) inhibitor
0,190	0,043	Retinyl-palmitate esterase inhibitor
0,168	0,022	Demethylsterigmatocystin 6-O-methyltransferase inhibitor
0,228	0,082	Antiperistaltic
0,313	0,167	MAP kinase stimulant
0,192	0,046	Cyclamate sulfohydrolase inhibitor
0,191	0,045	Acetylenecarboxylate hydratase inhibitor
0,259	0,115	CYP3A7 substrate
0,286	0,142	Gonadotropin antagonist
0,183	0,039	Glycerone-phosphate O-acyltransferase inhibitor
0,246	0,102	4-Coumarate-CoA ligase inhibitor
0,239	0,096	Transcription factor NF kappa A inhibitor
0,196	0,053	Nitric oxide scavenger

0,211	0,069	Crotonoyl-[acyl-carrier-protein] hydratase inhibitor
0,179	0,037	Protein-glucosylgalactosylhydroxylysine glucosidase inhibitor
0,273	0,132	CYP2E1 inducer
0,218	0,078	N-acetyllactosamine synthase inhibitor
0,222	0,082	Cyclohexyl-isocyanide hydratase inhibitor
0,214	0,073	Ornithine cyclodeaminase inhibitor
0,309	0,169	Oxygen scavenger
0,243	0,103	Pyruvate decarboxylase inhibitor
0,178	0,040	Glucuronolactone reductase inhibitor
0,190	0,052	Myosin-light-chain-phosphatase inhibitor
0,246	0,109	Methylumbelliferyl-acetate deacetylase inhibitor
0,141	0,004	Alpha 3 adrenoreceptor agonist
0,205	0,068	D-threo-aldose 1-dehydrogenase inhibitor
0,228	0,091	ATPase stimulant
0,168	0,032	(R)-limonene 6-monooxygenase inhibitor
0,207	0,071	N-(long-chain-acyl)ethanolamine deacylase inhibitor
0,191	0,055	Microtubule formation inhibitor
0,216	0,080	CYP2G1 substrate
0,147	0,012	Phosphoglucomutase inhibitor
0,175	0,040	Glycopeptide alpha-N-acetylgalactosaminidase inhibitor
0,243	0,109	N-benzyloxycarbonylglycine hydrolase inhibitor
0,170	0,035	Pectin lyase inhibitor
0,175	0,040	Cholesterol oxidase inhibitor
0,265	0,132	Myc inhibitor
0,223	0,089	Glutathione dehydrogenase (ascorbate) inhibitor
0,146	0,013	Dextranucrase inhibitor
0,196	0,063	2,3-Dihydroxyindole 2,3-dioxygenase inhibitor
0,149	0,016	2-Methylcitrate dehydratase inhibitor
0,222	0,090	Aspartate-ammonia ligase inhibitor
0,205	0,072	Procollagen N-endopeptidase inhibitor
0,193	0,061	Sterol 3-beta-glucosyltransferase inhibitor
0,180	0,049	Phosphoenolpyruvate-protein phosphotransferase inhibitor
0,222	0,091	Lactose synthase inhibitor
0,195	0,064	Leucine dehydrogenase inhibitor
0,172	0,041	Gaucher disease treatment
0,194	0,063	Alkylglycerone-phosphate synthase inhibitor
0,248	0,118	Para amino benzoic acid antagonist

0,202	0,072	Tauropine dehydrogenase inhibitor
0,225	0,095	Cholestanetriol 26-monooxygenase inhibitor
0,252	0,123	Enteropeptidase inhibitor
0,153	0,024	Antitreponemal
0,165	0,036	Cocain dependency treatment
0,225	0,097	Carbon-monoxide dehydrogenase inhibitor
0,269	0,141	Endopeptidase So inhibitor
0,150	0,022	Shab potassium channel blocker
0,225	0,097	NOS2 expression inhibitor
0,161	0,034	Choloylglycine hydrolase inhibitor
0,201	0,074	Rhodotorulapepsin inhibitor
0,189	0,062	Alpha-amylase inhibitor
0,184	0,057	GST M1-1 substrate
0,265	0,139	Antiseborrheic
0,134	0,007	Anesthetic inhalation
0,175	0,050	Ganglioside galactosyltransferase inhibitor
0,316	0,192	Octopamine antagonist
0,165	0,041	Deoxyribose-phosphate aldolase inhibitor
0,173	0,049	Protein synthesis stimulant
0,226	0,102	Succinate-semialdehyde dehydrogenase [NAD(P)+] inhibitor
0,137	0,013	Thromboxane antagonist
0,207	0,083	Di-trans,poly-cis-decaprenylcistransferase inhibitor
0,170	0,046	3-Ketovalidoxylamine C-N-lyase inhibitor
0,207	0,084	Carboxypeptidase D inhibitor
0,175	0,053	Testosterone 17beta-dehydrogenase inhibitor
0,210	0,088	Morphine 6-dehydrogenase inhibitor
0,136	0,014	Fatty-acyl-ethyl-ester synthase inhibitor
0,239	0,117	Thiosulfate dehydrogenase inhibitor
0,158	0,037	Pregnane X receptor agonist
0,171	0,049	Saccharolysin inhibitor
0,241	0,119	Ferredoxin-NAD+ reductase inhibitor
0,241	0,119	Naphthalene 1,2-dioxygenase inhibitor
0,199	0,078	Peptidyl-dipeptidase B inhibitor
0,186	0,065	Serratia marcescens nuclease inhibitor
0,213	0,093	DNA ligase (ATP) inhibitor
0,174	0,054	Polar-amino-acid-transporting ATPase inhibitor
0,207	0,087	Dimethylmaleate hydratase inhibitor

0,162	0,042	Glutamate-1-semialdehyde 2,1-aminomutase inhibitor
0,136	0,017	3(or 17)beta-hydroxysteroid dehydrogenase inhibitor
0,199	0,080	Guanosine-3',5'-bis(diphosphate) 3'-diphosphatase inhibitor
0,259	0,140	NAD(P)+-arginine ADP-ribosyltransferase inhibitor
0,182	0,064	ADP-ribosylarginine hydrolase inhibitor
0,179	0,061	Farnesyltranstransferase inhibitor
0,131	0,014	Imidazoleglycerol-phosphate dehydratase inhibitor
0,151	0,034	Glyceraldehyde-3-phosphate dehydrogenase (phosphorylating) inhibitor
0,169	0,052	Dolichyl-phosphatase inhibitor
0,196	0,080	UGT2B17 substrate
0,153	0,037	Trimethyllysine dioxygenase inhibitor
0,211	0,096	Opheline kinase inhibitor
0,211	0,096	Taurocyamine kinase inhibitor
0,200	0,085	Glycerol 2-dehydrogenase (NADP+) inhibitor
0,175	0,060	Trans-pentaprenyltranstransferase inhibitor
0,186	0,071	Dependence treatment
0,210	0,096	[acyl-carrier-protein] S-acetyltransferase inhibitor
0,236	0,121	4-Methoxybenzoate monooxygenase (O-demethylating) inhibitor
0,283	0,169	RNA-directed RNA polymerase inhibitor
0,133	0,019	Mycodextranase inhibitor
0,168	0,054	Mannan endo-1,6-alpha-mannosidase inhibitor
0,169	0,056	Glutamate (mGluR5) agonist
0,186	0,073	Sweetener
0,305	0,192	Fructose 5-dehydrogenase inhibitor
0,222	0,110	Thiamine-triphosphatase inhibitor
0,227	0,115	Thiamine pyridinylase inhibitor
0,168	0,056	Thioredoxin reductase inhibitor
0,161	0,050	Allantoinase inhibitor
0,223	0,112	Calcium channel activator
0,203	0,092	Gamma-D-Glutamyl-meso-diaminopimelate peptidase inhibitor
0,154	0,043	Glucarate dehydratase inhibitor
0,215	0,105	Arylesterase inhibitor
0,211	0,102	Antifibrinolytic
0,129	0,020	Gentamicin 2"-nucleotidyltransferase inhibitor
0,142	0,034	DELTA24-sterol reductase inhibitor
0,171	0,062	Laminaribiose phosphorylase inhibitor
0,148	0,040	(S)-carnitine 3-dehydrogenase inhibitor

0,217	0,109	CYP2C3 substrate
0,153	0,045	Xylose isomerase inhibitor
0,258	0,151	CYP3A4 inducer
0,180	0,073	Tentoxilysin inhibitor
0,134	0,028	Phosphatidylinositol 3-kinase stimulant
0,157	0,052	Pancreatic endopeptidase E inhibitor
0,153	0,047	Antineoplastic antimetabolite
0,202	0,096	Meprin B inhibitor
0,161	0,056	N-acetylneuraminate synthase inhibitor
0,169	0,064	Calcium-sensing receptor agonist
0,158	0,053	Hepatocyte nuclear factor antagonist
0,158	0,053	Hepatocyte nuclear factor 4 alpha antagonist
0,138	0,034	Succinate dehydrogenase inhibitor
0,156	0,051	N-(5-amino-5-carboxypentanoyl)-L-cysteinyl-D-valine synthase inhibitor
0,205	0,101	Glycine amidinotransferase inhibitor
0,116	0,012	Osmotic diuretic
0,158	0,055	Alpha-N-arabinofuranosidase inhibitor
0,152	0,048	Asparagine-tRNA ligase inhibitor
0,224	0,121	Aldehyde dehydrogenase (pyrroloquinoline-quinone) inhibitor
0,137	0,034	Thermomycin inhibitor
0,252	0,149	Lipoprotein lipase inhibitor
0,277	0,174	Caspase 3 stimulant
0,152	0,050	Acyl-lysine deacylase inhibitor
0,121	0,019	Alpha glucosidase inhibitor
0,113	0,011	Nav1.7 sodium channel blocker
0,324	0,223	Antineurotic
0,247	0,146	CYP3A inducer
0,123	0,021	High-mannose-oligosaccharide beta-1,4-N-acetylglucosaminyltransferase inhibitor
0,122	0,020	Ca ²⁺ -transporting ATPase inhibitor
0,139	0,038	4-Alpha-glucanotransferase inhibitor
0,161	0,060	Galactokinase inhibitor
0,173	0,072	Isopenicillin-N synthase inhibitor
0,259	0,158	Leukotriene-C4 synthase inhibitor
0,179	0,080	Antirickettsial
0,198	0,098	Alcohol dehydrogenase [NAD(P)+] inhibitor
0,174	0,074	Gamma-butyrobetaine dioxygenase inhibitor
0,138	0,038	Secretase stimulant

0,138	0,038	Secretase alpha stimulant
0,236	0,137	Antiinflammatory, intestinal
0,114	0,015	Alpha,alpha-trehalose phosphorylase inhibitor
0,252	0,153	Glutathione thiolesterase inhibitor
0,208	0,109	Phosphatidylcholine-sterol O-acyltransferase inhibitor
0,129	0,030	3-Deoxy-8-phosphooctulonate synthase inhibitor
0,107	0,008	Prostaglandin agonist
0,153	0,055	CDP-diacylglycerol-inositol 3-phosphatidyltransferase inhibitor
0,252	0,155	Gamma-guanidinobutyraldehyde dehydrogenase inhibitor
0,189	0,092	CYP2A3 substrate
0,226	0,129	Formate-dihydrofolate ligase inhibitor
0,188	0,091	Cyclopropane-fatty-acyl-phospholipid synthase inhibitor
0,263	0,166	Nitrate reductase (cytochrome) inhibitor
0,114	0,017	Acetylcholine M3 receptor agonist
0,118	0,022	NAD+ nucleosidase inhibitor
0,176	0,079	Vascular adhesion protein 1 inhibitor
0,151	0,056	Valine decarboxylase inhibitor
0,135	0,040	Choline dehydrogenase inhibitor
0,168	0,073	Lactate 2-monooxygenase inhibitor
0,245	0,149	Bilirubin oxidase inhibitor
0,171	0,076	4-Chlorobenzoyl-CoA dehalogenase inhibitor
0,135	0,040	Creatinase inhibitor
0,170	0,075	Glyoxylate reductase (NADP+) inhibitor
0,131	0,037	2-Dehydropantolactone reductase (A-specific) inhibitor
0,186	0,092	Ubiquitin thiolesterase inhibitor
0,105	0,011	Thromboxane A2 antagonist
0,143	0,050	Serine 3-dehydrogenase inhibitor
0,163	0,069	Choline-sulfatase inhibitor
0,108	0,015	Androgen agonist
0,143	0,050	Carboxymethylenebutenolidase inhibitor
0,233	0,140	Nitrite reductase [NAD(P)H] inhibitor
0,208	0,115	DNA-3-methyladenine glycosylase I inhibitor
0,167	0,075	N-acetylneuraminate 4-O-acetyltransferase inhibitor
0,227	0,135	4-Hydroxymandelate oxidase inhibitor
0,173	0,081	Antineoplastic (bladder cancer)
0,173	0,081	Glutamate 5-kinase inhibitor
0,122	0,031	Fructuronate reductase inhibitor

0,122	0,031	Tagaturonate reductase inhibitor
0,218	0,127	AR expression inhibitor
0,187	0,096	Antihematotoxic
0,134	0,044	D-arabinonolactone oxidase inhibitor
0,211	0,120	Leukotriene-B4 20-monooxygenase inhibitor
0,118	0,027	Homoserine O-succinyltransferase inhibitor
0,123	0,033	Beta-amylase inhibitor
0,220	0,130	Antiviral (Poxvirus)
0,143	0,052	Methionine decarboxylase inhibitor
0,129	0,039	Nicotinamide-nucleotide adenyltransferase inhibitor
0,228	0,138	Arylsulfate sulfotransferase inhibitor
0,117	0,027	Amino-acid racemase inhibitor
0,212	0,123	Cis-1,2-dihydro-1,2-dihydroxynaphthalene dehydrogenase inhibitor
0,157	0,068	Homoserine dehydrogenase inhibitor
0,147	0,058	Dihydrouracil dehydrogenase (NAD+) inhibitor
0,127	0,038	Glutamine-pyruvate transaminase inhibitor
0,127	0,038	Rhodopsin kinase inhibitor
0,092	0,003	Corticosteroid-like
0,146	0,058	Pectate lyase inhibitor
0,120	0,031	Ribose-5-phosphate-ammonia ligase inhibitor
0,181	0,092	Serine-pyruvate transaminase inhibitor
0,110	0,022	Anticholelithogenic
0,157	0,069	Geranylgeranyl-diphosphate geranylgeranyltransferase inhibitor
0,207	0,120	Phosphatidylserine decarboxylase inhibitor
0,124	0,037	Deoxycytidine deaminase inhibitor
0,146	0,059	Antidiabetic (type 1)
0,104	0,017	Arabinogalactan endo-1,4-beta-galactosidase inhibitor
0,155	0,068	3-Carboxyethylcatechol 2,3-dioxygenase inhibitor
0,124	0,038	Lysine decarboxylase inhibitor
0,155	0,070	Methyltransferase substrate
0,154	0,069	Glutamin-(asparagin-)ase inhibitor
0,245	0,160	Mitochondrial processing peptidase inhibitor
0,125	0,040	Valine dehydrogenase (NADP+) inhibitor
0,140	0,055	Urolithiasis treatment
0,161	0,076	Sphinganine-1-phosphate aldolase inhibitor
0,214	0,130	Methylenetetrahydrofolate reductase (NADPH) inhibitor
0,259	0,175	Amine dehydrogenase inhibitor

0,127	0,042	Malonate-semialdehyde dehydrogenase inhibitor
0,273	0,188	Nicotine dehydrogenase inhibitor
0,196	0,112	Uroporphyrinogen-III synthase inhibitor
0,138	0,054	Glycosylphosphatidylinositol diacylglycerol-lyase inhibitor
0,107	0,022	Alpha,alpha-trehalose phosphorylase (configuration-retaining) inhibitor
0,102	0,018	Alpha,alpha-phosphotrehalase inhibitor
0,165	0,081	3-Hydroxy-4-oxoquinoline 2,4-dioxygenase inhibitor
0,173	0,089	CYP4A2 substrate
0,213	0,129	Cell wall biosynthesis inhibitor
0,116	0,033	Arabinose isomerase inhibitor
0,176	0,093	UGT2B10 substrate
0,095	0,012	17-Beta-hydroxysteroid dehydrogenase 1 inhibitor
0,200	0,117	Oxytocic
0,093	0,010	Glutamate (mGluR3) agonist
0,120	0,037	Isomaltulose synthase inhibitor
0,130	0,047	1-Aminocyclopropane-1-carboxylate deaminase inhibitor
0,252	0,169	Menopausal disorders treatment
0,117	0,035	Tyrosine-protein kinase TYRO 10 inhibitor
0,251	0,170	Polarisation stimulant
0,125	0,044	Deoxyribonuclease X inhibitor
0,218	0,137	Antiviral (CMV)
0,115	0,034	Glycine receptor antagonist
0,112	0,032	2-Methyleneglutarate mutase inhibitor
0,236	0,156	Antiviral (Adenovirus)
0,133	0,053	Phosphonoacetate hydrolase inhibitor
0,132	0,052	Endo-1,4-beta-xylanase inhibitor
0,146	0,066	Galactose oxidase inhibitor
0,174	0,094	2,6-Dihydroxypyridine 3-monooxygenase inhibitor
0,198	0,119	Coccolysin inhibitor
0,183	0,104	Bothrolysin inhibitor
0,190	0,111	Nardilysin inhibitor
0,163	0,085	UGT1A5 substrate
0,156	0,078	tRNA nucleotidyltransferase inhibitor
0,224	0,146	HMOX1 expression enhancer
0,154	0,076	Vomilenine glucosyltransferase inhibitor
0,166	0,088	Signal peptidase I inhibitor
0,204	0,126	Acidifying agent non gastric

0,199	0,121	Anticarcinogenic
0,116	0,038	Beta amyloid protein antagonist
0,157	0,080	Mitochondrial intermediate peptidase inhibitor
0,144	0,067	Antibacterial, ophthalmic
0,141	0,065	3-Oxoadipate enol-lactonase inhibitor
0,134	0,058	CYP19 substrate
0,109	0,033	Heme oxygenase inhibitor
0,128	0,053	Diacylglycerol kinase inhibitor
0,154	0,078	IgA-specific metalloendopeptidase inhibitor
0,137	0,061	D-lactate dehydrogenase inhibitor
0,154	0,078	Tryptophan transaminase inhibitor
0,169	0,094	2-Enoate reductase inhibitor
0,123	0,049	Fructose-2,6-bisphosphate 6-phosphatase inhibitor
0,135	0,060	Glycogen (starch) synthase inhibitor
0,151	0,077	SMN2 expression enhancer
0,277	0,204	HIF1A expression inhibitor
0,125	0,052	Antineoplastic, alkylator
0,167	0,094	CYP4F2 substrate
0,103	0,030	11-Cis-retinyl-palmitate hydrolase inhibitor
0,133	0,060	2-Oxoisovalerate dehydrogenase (acylating) inhibitor
0,113	0,041	Ketohexokinase inhibitor
0,120	0,047	Sorbose dehydrogenase inhibitor
0,173	0,101	Choleretic
0,128	0,056	Lactaldehyde reductase (NADPH) inhibitor
0,108	0,036	Phosphatidylglycerol-membrane-oligosaccharide glycerophosphotransferase inhibitor
0,221	0,150	Antiprotozoal (Coccidial)
0,119	0,047	Gluconate dehydratase inhibitor
0,189	0,117	Tankyrase inhibitor
0,218	0,147	ICAM1 expression inhibitor
0,160	0,089	N-acetyl-gamma-glutamyl-phosphate reductase inhibitor
0,128	0,057	NAD+ kinase inhibitor
0,120	0,049	Cytochrome-c3 hydrogenase inhibitor
0,109	0,038	CYP4F substrate
0,109	0,038	Beta-N-acetylgalactosaminidase inhibitor
0,108	0,038	Ribonuclease U2 inhibitor
0,202	0,133	Indanol dehydrogenase inhibitor
0,118	0,049	Aerobactin synthase inhibitor

0,214	0,145	Cytochrome-b5 reductase inhibitor
0,163	0,094	Phosphatidylglycerophosphatase inhibitor
0,125	0,056	Beta-mannosidase inhibitor
0,149	0,080	3'-Nucleotidase inhibitor
0,216	0,148	Alkane 1-monooxygenase inhibitor
0,114	0,046	2-Aminoethylphosphonate-pyruvate transaminase inhibitor
0,139	0,070	Antineoplastic (gastric cancer)
0,150	0,082	Allantoin racemase inhibitor
0,123	0,055	Glutamate release inhibitor
0,193	0,125	Antibacterial
0,159	0,091	Rhamnulose-1-phosphate aldolase inhibitor
0,157	0,090	2,4-Diaminopentanoate dehydrogenase inhibitor
0,157	0,090	3-Hydroxybutyryl-CoA dehydrogenase inhibitor
0,157	0,090	Lysine 6-dehydrogenase inhibitor
0,125	0,058	2-Aminoadipate transaminase inhibitor
0,090	0,023	Chitin deacetylase inhibitor
0,177	0,110	Hyponitrite reductase inhibitor
0,111	0,044	1,5-Anhydro-D-fructose reductase inhibitor
0,142	0,075	Dry eye syndrome treatment
0,110	0,043	2-Hydroxy-3-oxopropionate reductase inhibitor
0,137	0,070	UGT1A10 substrate
0,119	0,053	Omega-amidase inhibitor
0,110	0,044	Bis(5'-adenosyl)-triphosphatase inhibitor
0,128	0,061	UDP-N-acetylglucosamine-dolichyl-phosphate N-acetylglucosaminophosphotransferase inhibitor
0,182	0,116	Bontoxilysin inhibitor
0,165	0,099	Phenylalanine(histidine) transaminase inhibitor
0,142	0,076	UGT2B18 substrate
0,125	0,060	Fructose-2,6-bisphosphate 2-phosphatase inhibitor
0,096	0,030	2-Dehydro-3-deoxy-phosphogluconate aldolase inhibitor
0,112	0,047	Glycerophosphocholine cholinephosphodiesterase inhibitor
0,178	0,113	Carnitinamidase inhibitor
0,158	0,093	Dolichol kinase inhibitor
0,076	0,011	Microtubule stabilization
0,085	0,020	NMDA receptor polyamine site agonist
0,101	0,036	L-fuconate dehydratase inhibitor
0,136	0,072	Iron-cytochrome-c reductase inhibitor
0,145	0,081	Melanin inhibitor

0,133	0,069	Diisopropyl-fluorophosphatase inhibitor
0,178	0,114	Methanol dehydrogenase inhibitor
0,286	0,222	TP53 expression enhancer
0,106	0,042	Gluconokinase inhibitor
0,145	0,082	Granzyme A inhibitor
0,094	0,031	(S)-2-Methylmalate dehydratase inhibitor
0,113	0,049	Homocysteine desulphydrase inhibitor
0,106	0,043	Proline dehydrogenase inhibitor
0,138	0,076	Phosphoinositide phospholipase C inhibitor
0,069	0,006	Protein phosphatase 2A inhibitor
0,117	0,055	Lysozyme inhibitor
0,136	0,074	Cellulase inhibitor
0,210	0,149	DNA-(apurinic or apyrimidinic site) lyase inhibitor
0,203	0,141	4-Nitrophenylphosphatase inhibitor
0,107	0,046	Dichloromuconate cycloisomerase inhibitor
0,202	0,141	Myosin ATPase inhibitor
0,094	0,034	Alpha-L-fucosidase inhibitor
0,131	0,070	Allophanate hydrolase inhibitor
0,130	0,070	Selenocysteine lyase inhibitor
0,163	0,103	Gallate decarboxylase inhibitor
0,136	0,076	Cerebroside-sulfatase inhibitor
0,212	0,152	Venom exonuclease inhibitor
0,161	0,101	Metallo-carboxypeptidase D inhibitor
0,147	0,088	Pyruvate dehydrogenase (cytochrome) inhibitor
0,147	0,088	Trans-2-enoyl-CoA reductase (NAD+) inhibitor
0,089	0,030	CYP4F12 substrate
0,212	0,152	Urethanase inhibitor
0,135	0,076	GABA inverse agonist
0,135	0,076	GABA A inverse agonist
0,101	0,042	3-Oxosteroid 1-dehydrogenase inhibitor
0,109	0,050	Globoside alpha-N-acetylgalactosaminyltransferase inhibitor
0,113	0,054	NMDA receptor polyamine site antagonist
0,066	0,007	Antimitotic, Podophyllotoxin-like
0,146	0,088	N6-methyl-lysine oxidase inhibitor
0,064	0,006	Dipeptidyl peptidase IV inhibitor
0,102	0,044	2-Dehydro-3-deoxy-L-arabinonate dehydratase inhibitor
0,128	0,070	Haloacetate dehalogenase inhibitor

0,128	0,070	Prepilin peptidase inhibitor
0,085	0,027	Oxaloacetate tautomerase inhibitor
0,104	0,046	Beta-D-fucosidase inhibitor
0,128	0,070	Agmatinase inhibitor
0,139	0,081	Gly-X carboxypeptidase inhibitor
0,083	0,026	Deoxyhypusine synthase inhibitor
0,082	0,025	3-Alpha-hydroxysteroid dehydrogenase (B-specific) inhibitor
0,094	0,037	Epoxide hydrolase substrate
0,091	0,034	Alpha-1,6-mannosyl-glycoprotein 6-beta-N-acetylglucosaminyltransferase inhibitor
0,135	0,078	Lipotropic
0,155	0,098	Homoaconitate hydratase inhibitor
0,155	0,098	6-Carboxyhexanoate-CoA ligase inhibitor
0,155	0,098	Biotin-CoA ligase inhibitor
0,155	0,098	Triacetate-lactonase inhibitor
0,091	0,034	Alpha-L-rhamnosidase inhibitor
0,067	0,011	11-Beta-hydroxysteroid dehydrogenase inhibitor
0,121	0,065	Poly(ADP-ribose) glycohydrolase inhibitor
0,126	0,070	CYP26A substrate
0,132	0,076	Valine-tRNA ligase inhibitor
0,188	0,132	UGT2B4 substrate
0,110	0,054	Poly(3-hydroxybutyrate) depolymerase inhibitor
0,271	0,215	2-Hydroxyquinoline 8-monooxygenase inhibitor
0,115	0,060	Guanidinodeoxy-scylo-inositol-4-phosphatase inhibitor
0,157	0,102	Camphor 1,2-monooxygenase inhibitor
0,128	0,073	Galactose 1-dehydrogenase (NADP+) inhibitor
0,128	0,073	Beta-alanine-pyruvate transaminase inhibitor
0,147	0,092	UGT2B9 substrate
0,111	0,056	Heparan-alpha-glucosaminide N-acetyltransferase inhibitor
0,133	0,078	CYP4B substrate
0,148	0,094	Carnosine synthase inhibitor
0,121	0,066	Mevalonate kinase inhibitor
0,217	0,163	Analgesic stimulant
0,095	0,042	Galactosylgalactosylglucosylceramidase inhibitor
0,062	0,009	CYP4F8 substrate
0,067	0,013	Actin depolymerization stimulant
0,112	0,059	Galactoside 2-alpha-L-fucosyltransferase inhibitor
0,077	0,023	ATP diphosphatase inhibitor

0,200	0,147	Cyclic AMP modulator
0,070	0,017	Sucrose-phosphate phosphatase inhibitor
0,111	0,059	Chondroitin 6-sulfotransferase inhibitor
0,138	0,085	3-Aminobutyryl-CoA ammonia-lyase inhibitor
0,248	0,196	Spermidine dehydrogenase inhibitor
0,071	0,019	Amylosucrase inhibitor
0,064	0,012	11-Beta-hydroxysteroid dehydrogenase 1 inhibitor
0,138	0,086	Penicillopepsin inhibitor
0,098	0,046	Contraceptive male
0,094	0,041	Homospermidine synthase inhibitor
0,174	0,122	Acyl-CoA oxidase inhibitor
0,165	0,113	Alanine-tRNA ligase inhibitor
0,142	0,090	Tetrahydroxynaphthalene reductase inhibitor
0,114	0,063	UGT2B11 substrate
0,079	0,028	Alpha-mannosidase inhibitor
0,125	0,074	Biotin carboxylase inhibitor
0,133	0,083	Aldehyde ferredoxin oxidoreductase inhibitor
0,118	0,068	ATP adenylyltransferase inhibitor
0,179	0,128	Peroxidase substrate
0,137	0,087	2-Acylglycerol O-acyltransferase inhibitor
0,096	0,045	3-Isopropylmalate dehydrogenase inhibitor
0,110	0,060	Pantothenase inhibitor
0,125	0,075	CYP4B1 substrate
0,103	0,053	Cell wall synthesis inhibitor
0,129	0,079	Alpha-Methylacyl-CoA racemase inhibitor
0,124	0,075	8-Amino-7-oxononanoate synthase inhibitor
0,173	0,123	Retinal dehydrogenase inhibitor
0,192	0,143	X-methyl-His dipeptidase inhibitor
0,122	0,073	Excitatory amino acid transporter EAAC1 inhibitor
0,104	0,055	Glyceraldehyde-3-phosphate dehydrogenase (NADP+) inhibitor
0,175	0,126	Histidinol dehydrogenase inhibitor
0,087	0,038	Xylan 1,4-beta-xylosidase inhibitor
0,241	0,193	CYP19A1 expression inhibitor
0,124	0,076	Thiamine-phosphate kinase inhibitor
0,161	0,113	Urate-ribonucleotide phosphorylase inhibitor
0,161	0,113	Nicotinic alpha4beta2 receptor antagonist
0,121	0,073	O-acetylhomoserine aminocarboxypropyltransferase inhibitor

0,152	0,105	Aldehyde dehydrogenase 2 substrate
0,081	0,034	Peptidoglycan beta-N-acetylmuramidase inhibitor
0,085	0,038	Steroid sulfotransferase inhibitor
0,073	0,027	1-Alkyl-2-acetyl glycerol O-acyltransferase inhibitor
0,119	0,073	NAD(P)+ transhydrogenase (B-specific) inhibitor
0,107	0,061	Leucine transaminase inhibitor
0,144	0,098	6-Pyruvoyltetrahydropterin synthase inhibitor
0,116	0,070	Glycoprotein 3-alpha-L-fucosyltransferase inhibitor
0,084	0,038	Gynecological disorders treatment
0,080	0,034	CYP2A13 substrate
0,132	0,087	Chitin synthase inhibitor
0,099	0,054	Phosphofructokinase-1 inhibitor
0,103	0,058	D-glutamate oxidase inhibitor
0,123	0,078	Aminocarboxymuconate-semialdehyde decarboxylase inhibitor
0,124	0,079	Phenylpyruvate decarboxylase inhibitor
0,223	0,178	Antineoplastic (solid tumors)
0,150	0,105	Penicillin amidase inhibitor
0,136	0,092	Glucosyl transferase inhibitor
0,141	0,097	Lipoxygenase substrate
0,136	0,091	Lombricine kinase inhibitor
0,099	0,055	Monocarboxylic acid transporter 1 inhibitor
0,099	0,055	Monocarboxylic acid transporter inhibitor
0,091	0,046	[hydroxymethylglutaryl-CoA reductase (NADPH)] kinase inhibitor
0,167	0,122	Nucleoside oxidase (H2O2-forming) inhibitor
0,115	0,071	Neuropsin inhibitor
0,116	0,072	Isovaleryl-CoA dehydrogenase inhibitor
0,134	0,089	Phenylacetate-CoA ligase inhibitor
0,091	0,047	Phosphoenolpyruvate carboxykinase (diphosphate) inhibitor
0,122	0,078	(S)-2-hydroxy-acid oxidase inhibitor
0,250	0,206	Antihypoxic
0,144	0,100	4-Hydroxyglutamate transaminase inhibitor
0,093	0,049	Cysteine transaminase inhibitor
0,143	0,100	Creatinine deaminase inhibitor
0,149	0,106	Glutathione peroxidase inhibitor
0,083	0,040	mRNA (guanine-N7-)-methyltransferase inhibitor
0,228	0,185	Antihelmintic (Nematodes)
0,064	0,021	Biotin-[methylmalonyl-CoA-carboxytransferase] ligase inhibitor

0,082	0,039	4a-Hydroxytetrahydrobiopterin dehydratase inhibitor
0,077	0,034	Aldose 1-epimerase inhibitor
0,145	0,103	Acaricide
0,117	0,075	Glucan endo-1,3-alpha-glucosidase inhibitor
0,116	0,073	DNA directed DNA polymerase inhibitor
0,225	0,184	CYP3A3 substrate
0,100	0,058	Isocitrate dehydrogenase (NAD+) inhibitor
0,178	0,136	Aromatic-hydroxylamine O-acetyltransferase inhibitor
0,150	0,109	Antihelmintic (Fasciola)
0,071	0,029	CYP24 inhibitor
0,138	0,097	Pyridoxine 4-oxidase inhibitor
0,138	0,096	Allyl-alcohol dehydrogenase inhibitor
0,089	0,047	Ribulose-bisphosphate carboxylase inhibitor
0,144	0,103	Adenylate cyclase stimulant
0,114	0,073	Iduronate-2-sulfatase inhibitor
0,087	0,046	Malate dehydrogenase (NADP+) inhibitor
0,168	0,127	Antihypotensive
0,102	0,062	Leucine-tRNA ligase inhibitor
0,109	0,069	L-lysine 6-transaminase inhibitor
0,140	0,100	2,4-Dichlorophenol 6-monooxygenase inhibitor
0,103	0,063	Aspartate-ammonia ligase (ADP-forming) inhibitor
0,137	0,097	Aspartoacylase inhibitor
0,079	0,039	Aspartate 1-decarboxylase inhibitor
0,256	0,216	Preneoplastic conditions treatment
0,079	0,039	Lactate-malate transhydrogenase inhibitor
0,144	0,105	Acetylornithine deacetylase inhibitor
0,065	0,026	Glucan 1,4-alpha-glucosidase inhibitor
0,160	0,121	Sulfite reductase inhibitor
0,051	0,013	Sucrose phosphorylase inhibitor
0,064	0,025	Prostaglandin-I synthase inhibitor
0,113	0,074	N4-(beta-N-acetylglucosaminyl)-L-asparaginase inhibitor
0,089	0,051	Cellobiose phosphorylase inhibitor
0,212	0,174	Tyrosine 3 hydroxylase inhibitor
0,065	0,027	UGT2B4E substrate
0,065	0,027	UGT2B23 substrate
0,065	0,027	UGT2B19 substrate
0,065	0,027	UGT2B30 substrate

0,065	0,027	UGT2B4D substrate
0,100	0,061	Adenylylsulphatase inhibitor
0,088	0,050	L-lysine oxidase inhibitor
0,168	0,130	Diamine N-acetyltransferase inhibitor
0,158	0,120	Dihydroxy-acid dehydratase inhibitor
0,111	0,073	D-2-hydroxy-acid dehydrogenase inhibitor
0,089	0,051	Retinol O-fatty-acyltransferase inhibitor
0,053	0,016	Dipeptidyl peptidase II inhibitor
0,079	0,042	CYP2C2 substrate
0,063	0,026	Aromatase inhibitor
0,146	0,109	Hydroxymethylglutaryl-CoA lyase inhibitor
0,146	0,110	Glycine C-acetyltransferase inhibitor
0,101	0,065	Aminoacylase inhibitor
0,112	0,076	Anabolic
0,109	0,073	Ribonuclease inhibitor
0,173	0,137	Prolyl aminopeptidase inhibitor
0,055	0,019	Methylaspartate mutase inhibitor
0,127	0,091	Aldehyde dehydrogenase (NADP+) inhibitor
0,188	0,153	Gingipain K inhibitor
0,082	0,047	Cushing's syndrome treatment
0,135	0,100	Protein synthesis inhibitor
0,061	0,026	Dipeptidyl peptidase inhibitor
0,063	0,028	Glucan 1,3-alpha-glucosidase inhibitor
0,184	0,149	Glutaminy-peptide cyclotransferase inhibitor
0,075	0,041	3-Dehydroquinase synthase inhibitor
0,059	0,025	CYP17 substrate
0,114	0,080	Pantoate 4-dehydrogenase inhibitor
0,120	0,086	2-Oxoglutarate decarboxylase inhibitor
0,078	0,044	Glutaminyl-tRNA synthase (glutamine-hydrolysing) inhibitor
0,091	0,057	UDP-N-acetylglucosamine diphosphorylase inhibitor
0,160	0,126	Opine dehydrogenase inhibitor
0,071	0,037	[acetyl-CoA carboxylase] kinase inhibitor
0,258	0,224	Sulfur reductase inhibitor
0,056	0,022	D(-)-tartrate dehydratase inhibitor
0,085	0,051	2-Methylcitrate synthase inhibitor
0,063	0,030	D-lactate-2-sulfatase inhibitor
0,138	0,105	CDP-4-dehydro-6-deoxyglucose reductase inhibitor

0,153	0,120	Indoleacetaldoxime dehydratase inhibitor
0,052	0,018	Orotidylate decarboxylase inhibitor
0,053	0,019	NADPH oxidoreductase inhibitor
0,092	0,059	Galactosylceramide sulfotransferase inhibitor
0,114	0,081	Glutathione S-transferase substrate
0,083	0,050	Argininosuccinate lyase inhibitor
0,104	0,072	L-galactonolactone oxidase inhibitor
0,105	0,073	Aldehyde dehydrogenase [NAD(P)+] inhibitor
0,139	0,107	Polynucleotide 5'-hydroxy-kinase inhibitor
0,085	0,053	Deoxycytidine kinase inhibitor
0,103	0,072	Pyrimidine-deoxynucleoside 2'-dioxygenase inhibitor
0,108	0,076	NADH dehydrogenase inhibitor
0,089	0,057	Squalene-hopene cyclase inhibitor
0,059	0,028	Na+ K+ transporting ATPase inhibitor
0,088	0,057	5-Oxoprolinase (ATP-hydrolysing) inhibitor
0,106	0,075	D-lactate dehydrogenase (cytochrome) inhibitor
0,102	0,071	Cholate-CoA ligase inhibitor
0,087	0,056	Saccharopine dehydrogenase (NAD+, L-glutamate-forming) inhibitor
0,061	0,030	3'(2'),5'-Bisphosphate nucleotidase inhibitor
0,138	0,107	Cytochrome-b5 reductase substrate
0,134	0,104	Histamine agonist
0,049	0,018	Tartrate decarboxylase inhibitor
0,035	0,004	Prostaglandin EP2 agonist
0,097	0,067	tRNA (cytosine-5-)-methyltransferase inhibitor
0,090	0,059	D-proline reductase (dithiol) inhibitor
0,124	0,094	HIV-2 reverse transcriptase inhibitor
0,153	0,123	Antineoplastic (thyroid cancer)
0,065	0,035	Mannosidase inhibitor
0,064	0,034	Acidifying agent gastric
0,136	0,107	Benzoylformate decarboxylase inhibitor
0,167	0,137	Ferredoxin hydrogenase inhibitor
0,074	0,045	3(or 17)alpha-hydroxysteroid dehydrogenase inhibitor
0,072	0,042	L-lactate dehydrogenase (cytochrome) inhibitor
0,148	0,119	Stromelysin 2 inhibitor
0,072	0,043	Lactaldehyde dehydrogenase inhibitor
0,128	0,099	Oligopeptidase B inhibitor
0,137	0,108	N-methyl-2-oxoglutaramate hydrolase inhibitor

0,094	0,066	Aspartate transaminase inhibitor
0,109	0,081	Carnitine 3-dehydrogenase inhibitor
0,066	0,038	Androgen antagonist
0,107	0,078	CYP19 inhibitor
0,106	0,078	Aspartate kinase inhibitor
0,139	0,111	Inorganic diphosphatase inhibitor
0,087	0,059	Deoxyribonuclease (pyrimidine dimer) inhibitor
0,058	0,031	CYP24 substrate
0,125	0,098	Aminopeptidase Y inhibitor
0,082	0,054	Alpha,alpha-trehalose-phosphate synthase (UDP-forming) inhibitor
0,073	0,046	4-Hydroxy-4-methyl-2-oxoglutarate aldolase inhibitor
0,134	0,107	Acetate kinase inhibitor
0,101	0,074	Diacylglycerol cholinephosphotransferase inhibitor
0,062	0,035	Prolyl endopeptidase inhibitor
0,075	0,049	3-Dehydroquinate dehydratase inhibitor
0,076	0,050	Glycerophosphocholine phosphodiesterase inhibitor
0,060	0,033	D-Serine ammonia-lyase inhibitor
0,075	0,049	ATP deaminase inhibitor
0,113	0,087	Ethanolaminephosphotransferase inhibitor
0,125	0,100	Peptide-tryptophan 2,3-dioxygenase inhibitor
0,076	0,051	Aspartate-semialdehyde dehydrogenase inhibitor
0,078	0,053	Cyanate hydratase inhibitor
0,083	0,058	Scyllo-inosamine-4-phosphate amidinotransferase inhibitor
0,106	0,081	Sulfate adenylyltransferase (ADP) inhibitor
0,124	0,099	Ferrochelataze inhibitor
0,100	0,075	Glycerol-3-phosphate O-acyltransferase inhibitor
0,178	0,153	Sigma receptor agonist
0,091	0,066	Mannonate dehydratase inhibitor
0,099	0,074	DNA-3-methyladenine glycosylase II inhibitor
0,160	0,136	Indolepyruvate C-methyltransferase inhibitor
0,176	0,152	Acetylserotonin O-methyltransferase inhibitor
0,122	0,098	Peptidylamidoglycolate lyase inhibitor
0,103	0,079	Cysteine desulfurase inhibitor
0,047	0,023	Electron transport complex I inhibitor
0,180	0,156	CYP2B2 substrate
0,124	0,100	Plasmanylethanolamine desaturase inhibitor
0,058	0,035	Hydroxylysine kinase inhibitor

0,027	0,005	NADH oxidase inhibitor
0,138	0,116	3-Demethylubiquinone-9 3-O-methyltransferase inhibitor
0,045	0,022	Glucocorticoid antagonist
0,077	0,054	Polyamine biosynthesis inhibitor
0,058	0,036	Biotin-[propionyl-CoA-carboxylase (ATP-hydrolysing)] ligase inhibitor
0,094	0,072	Allantoicase inhibitor
0,083	0,061	Inositol-polyphosphate 5-phosphatase inhibitor
0,054	0,032	Propionate CoA-transferase inhibitor
0,248	0,226	Insulin promoter
0,069	0,048	Glutathione reductase stimulant
0,069	0,048	Glutathione reductase (NADPH) stimulant
0,234	0,213	N-hydroxyarylamine O-acetyltransferase inhibitor
0,066	0,045	Dipeptidyl peptidase I inhibitor
0,078	0,057	2-Oxoaldehyde dehydrogenase (NAD+) inhibitor
0,084	0,063	CYP26 substrate
0,108	0,087	5 Hydroxytryptamine 4A antagonist
0,180	0,159	Methane monooxygenase inhibitor
0,071	0,051	6-Phosphofructo-2-kinase inhibitor
0,126	0,105	Brachyurin inhibitor
0,060	0,040	Deoxyadenosine kinase inhibitor
0,195	0,175	FMO1 substrate
0,037	0,017	Homoisocitrate dehydrogenase inhibitor
0,058	0,038	Glycine N-choloyltransferase inhibitor
0,083	0,064	UDP-N-acetylglucosamine 2-epimerase inhibitor
0,092	0,073	Dihydrouracil oxidase inhibitor
0,056	0,037	CMP-KDO synthase inhibitor
0,095	0,075	Glutamate N-acetyltransferase inhibitor
0,131	0,112	Arylacetonitrilase inhibitor
0,036	0,017	Transaldolase inhibitor
0,141	0,122	Guanidinoacetate kinase inhibitor
0,175	0,157	Cathepsin T inhibitor
0,206	0,187	4-Hydroxyproline epimerase inhibitor
0,169	0,151	Endopeptidase La inhibitor
0,089	0,071	Thiamine-phosphate diphosphorylase inhibitor
0,092	0,074	UDP-glucose 4-epimerase inhibitor
0,093	0,075	Chloramphenicol O-acetyltransferase inhibitor
0,072	0,054	Phosphoribulokinase inhibitor

0,072	0,054	N-acetylglucosaminyldiphosphoundecaprenol N-acetyl-beta-D-mannosaminyltransferase inhibitor
0,096	0,078	Site-specific DNA-methyltransferase (adenine-specific) inhibitor
0,071	0,054	Dihydrolipoamide S-acetyltransferase inhibitor
0,059	0,042	Acetylcholine muscarinic agonist
0,060	0,042	Alpha-1,6-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase inhibitor
0,112	0,094	Cathepsin H inhibitor
0,066	0,048	Corticotropin releasing factor antagonist
0,044	0,026	Androst-4-ene-3,17-dione monooxygenase inhibitor
0,090	0,073	Cytosole dipeptidase inhibitor
0,111	0,094	Sulfur dioxygenase inhibitor
0,109	0,092	Protein-tyrosine sulfotransferase inhibitor
0,030	0,014	Phenylethanolamine N methyltransferase inhibitor
0,129	0,113	Hydroxymethylbilane synthase inhibitor
0,114	0,098	Endoglycosylceramidase inhibitor
0,123	0,107	3,4-Dihydroxy-9,10-secoandrosta-1,3,5(10)-triene-9,17-dione 4,5-dioxygenase inhibitor
0,051	0,035	HCV NS3/NS4A protease inhibitor
0,068	0,052	UGT2B7Y substrate
0,068	0,052	UGT2B7H substrate
0,129	0,113	Restless leg syndrome treatment
0,132	0,116	CYP2D1 substrate
0,094	0,078	Glycoprotein-fucosylgalactoside alpha-N-acetylgalactosaminyltransferase inhibitor
0,119	0,103	(R,R)-butanediol dehydrogenase inhibitor
0,048	0,032	Thymidine kinase 1 inhibitor
0,071	0,056	Hydroperoxide dehydratase inhibitor
0,074	0,059	S-methyl-5-thioribose kinase inhibitor
0,085	0,070	Benzaldehyde dehydrogenase (NAD+) inhibitor
0,081	0,066	Acetoacetate decarboxylase inhibitor
0,215	0,200	Retinoic acid metabolism inhibitor
0,084	0,069	Necroptosis inhibitor
0,115	0,100	Cysteine synthase inhibitor
0,085	0,070	Glycerol dehydratase inhibitor
0,079	0,064	Guanidinopropionase inhibitor
0,048	0,034	CYP3A11 substrate
0,112	0,098	Antitussive, narcotic
0,089	0,075	Ribitol 2-dehydrogenase inhibitor
0,076	0,062	Cystathionine beta-lyase inhibitor

0,063	0,049	Glycerol kinase inhibitor
0,095	0,081	Mallyl-CoA lyase inhibitor
0,067	0,053	L-aminoadipate-semialdehyde dehydrogenase inhibitor
0,095	0,081	Glucose 1-dehydrogenase inhibitor
0,121	0,107	Adenylate kinase inhibitor
0,119	0,105	N-Acyl-D-amino-acid deacylase inhibitor
0,069	0,055	Serine-tRNA ligase inhibitor
0,104	0,090	Contraceptive
0,066	0,052	Glutamate (mGluR8) agonist
0,105	0,091	Transcription factor NF kappa B inhibitor
0,060	0,047	Thioether S-methyltransferase inhibitor
0,115	0,102	Candidapepsin inhibitor
0,111	0,098	Cancer procoagulant inhibitor
0,054	0,041	Assemblin inhibitor
0,029	0,016	Hexokinase stimulant
0,058	0,046	Quinate 5-dehydrogenase inhibitor
0,150	0,138	Aminomuconate-semialdehyde dehydrogenase inhibitor
0,086	0,074	Phosphatidate cytidyltransferase inhibitor
0,218	0,206	Loop diuretic
0,132	0,120	Tyrosine kinase stimulant
0,035	0,024	Membrane-oligosaccharide glycerophosphotransferase inhibitor
0,075	0,064	(R)-aminopropanol dehydrogenase inhibitor
0,121	0,109	(S)-3-hydroxyacid ester dehydrogenase inhibitor
0,132	0,121	Threonine aldolase inhibitor
0,019	0,008	Glutamate (mGluR2) antagonist
0,217	0,206	Superoxide dismutase inhibitor
0,088	0,077	Glycerol-3-phosphate dehydrogenase (NAD+) inhibitor
0,112	0,101	Galactoside O-acetyltransferase inhibitor
0,090	0,080	Adenosylmethionine-8-amino-7-oxononanoate transaminase inhibitor
0,105	0,094	Pyruvate dehydrogenase inhibitor
0,082	0,072	Alpha,alpha-trehalase inhibitor
0,062	0,052	Formimidoylglutamase inhibitor
0,070	0,060	N-acetylglucosamine-6-phosphate deacetylase inhibitor
0,074	0,064	Neolactotetraosylceramide alpha-2,3-sialyltransferase inhibitor
0,038	0,028	Dichloromethane dehalogenase inhibitor
0,063	0,053	UDP-glucose 6-dehydrogenase inhibitor
0,038	0,028	Isopentenyl-diphosphate DELTA-isomerase inhibitor

0,019	0,010	Gestagen-like
0,117	0,108	Liver X receptor antagonist
0,045	0,036	N-acetylglucosaminyldiphosphodolichol N-acetylglucosaminyltransferase inhibitor
0,187	0,178	Chloride channel activator
0,085	0,076	Triose-phosphate isomerase inhibitor
0,181	0,171	Monodehydroascorbate reductase (NADH) inhibitor
0,098	0,089	Decylcitrate synthase inhibitor
0,036	0,028	Phosphoglycerate phosphatase inhibitor
0,187	0,178	NADPH-ferrihemoprotein reductase inhibitor
0,058	0,050	Beta-glucosidase inhibitor
0,172	0,164	L-threonine 3-dehydrogenase inhibitor
0,165	0,157	Prostaglandin-E2 9-reductase inhibitor
0,085	0,077	Malate dehydrogenase (oxaloacetate-decarboxylating) inhibitor
0,166	0,158	Immunostimulant
0,074	0,066	Succinate-hydroxymethylglutarate CoA-transferase inhibitor
0,092	0,085	Aspartyl aminopeptidase inhibitor
0,031	0,023	Nociceptin (N/OFQ) receptor antagonist
0,107	0,100	Acylglycerone-phosphate reductase inhibitor
0,112	0,104	3-Hydroxyphenylacetate 6-hydroxylase inhibitor
0,097	0,090	Squalene epoxidase inhibitor
0,016	0,009	Ether-a-go-go potassium channel blocker
0,016	0,009	Ether-a-go-go potassium channel 1 blocker
0,081	0,074	Astringent
0,101	0,094	Skin whitener
0,115	0,109	Tryptophanyl aminopeptidase inhibitor
0,026	0,020	Alpha glucosidase I inhibitor
0,022	0,015	11-Beta-hydroxysteroid dehydrogenase 2 inhibitor
0,033	0,026	Glucose-6-phosphate isomerase inhibitor
0,091	0,084	Cerevisin inhibitor
0,123	0,116	Pyruvate carboxylase inhibitor
0,152	0,146	Pitrilysin inhibitor
0,144	0,138	Thermitase inhibitor
0,080	0,073	CTP synthase inhibitor
0,061	0,055	Isocitrate dehydrogenase (NADP+) inhibitor
0,088	0,082	Alanine transaminase inhibitor
0,047	0,041	Prostacyclin agonist
0,089	0,083	Diiodophenylpyruvate reductase inhibitor

0,066	0,060	Maleate hydratase inhibitor
0,172	0,166	ATP phosphoribosyltransferase inhibitor
0,077	0,071	D-malate dehydrogenase (decarboxylating) inhibitor
0,107	0,101	Gingipain R inhibitor
0,054	0,048	Plus-end-directed kinesin ATPase inhibitor
0,049	0,044	Beta galactosidase inhibitor
0,040	0,035	Thymidine-triphosphatase inhibitor
0,031	0,026	Sodium/glucose cotransporter 1 inhibitor
0,027	0,022	Phosphopyruvate hydratase inhibitor
0,089	0,084	D-Ornithine 4,5-aminomutase inhibitor
0,049	0,045	Uracil phosphoribosyltransferase inhibitor
0,105	0,101	Inositol 1,4,5-trisphosphate 3-kinase inhibitor
0,072	0,068	tRNA (guanine-N2-)-methyltransferase inhibitor
0,014	0,010	Kanamycin kinase inhibitor
0,135	0,131	Cyclopentanone monooxygenase inhibitor
0,019	0,015	Glutamate (mGluR3) antagonist
0,057	0,054	Beta-1,4-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase inhibitor
0,073	0,069	CMP-N-acylneuraminate phosphodiesterase inhibitor
0,046	0,043	Anhydrotetracycline monooxygenase inhibitor
0,075	0,071	SULT2A1 substrate
0,072	0,068	Muconate cycloisomerase inhibitor
0,091	0,088	Carboxylesterase inhibitor
0,016	0,012	Antiprotozoal activity enhancer
0,050	0,047	Carbamoyl-serine ammonia-lyase inhibitor
0,074	0,072	Diguanidinobutanase inhibitor
0,069	0,066	ACK1 kinase inhibitor
0,087	0,084	Ornithine-oxo-acid transaminase inhibitor
0,109	0,107	Homogentisate 1,2-dioxygenase inhibitor
0,012	0,009	Actin polymerization inhibitor
0,033	0,031	Endo-beta-N-acetylglucosaminidase inhibitor
0,068	0,065	Ribonucleoside diphosphate reductase inhibitor
0,105	0,102	Arylalkyl acylamidase inhibitor
0,091	0,089	D-cysteine desulfhydrase inhibitor
0,067	0,065	Oligo-1,6-glucosidase inhibitor
0,092	0,090	Glucosamine-1-phosphate N-acetyltransferase inhibitor
0,140	0,138	CTGF expression inhibitor
0,095	0,093	Glucosamine-6-phosphate deaminase inhibitor

0,038	0,036	2-Ethylmalate synthase inhibitor
0,071	0,070	[myelin basic protein]-arginine N-methyltransferase inhibitor
0,123	0,122	UGT2B7 substrate
0,097	0,095	CYP3C substrate
0,066	0,065	D-alanine transaminase inhibitor
0,123	0,122	Tryptophan alpha,beta-oxidase inhibitor
0,126	0,125	Heat shock protein agonist
0,020	0,019	Cortisone alpha-reductase inhibitor
0,023	0,022	Tartrate dehydrogenase inhibitor
0,109	0,108	Acid-sensing ion channel blocker
0,088	0,088	2-Nitrophenol 2-monooxygenase inhibitor
0,079	0,079	Capillary fragility treatment
0,125	0,125	4-Chlorophenylacetate 3,4-dioxygenase inhibitor
0,116	0,115	4-Hydroxybenzoate nonaprenyltransferase inhibitor
0,123	0,123	Picornain 3C inhibitor
0,047	0,047	Glutamate (mGluR1) agonist
0,195	0,194	Farnesoid X receptor antagonist
0,057	0,057	GMP synthase inhibitor

Complex 5 All

☒ All
 ☐ Pa>Pi
 ☐ Pa>0,3
 ☐ Pa>0,7

Pa	Pi	Activity
0,847	0,018	Phobic disorders treatment
0,829	0,009	Antineoplastic
0,832	0,018	Testosterone 17beta-dehydrogenase (NADP+) inhibitor
0,816	0,032	CYP2C12 substrate
0,786	0,015	Acylcarnitine hydrolase inhibitor
0,790	0,023	Saccharopepsin inhibitor
0,790	0,023	Chymosin inhibitor
0,790	0,023	Acrocylindropepsin inhibitor
0,774	0,024	Antiseborrheic
0,754	0,014	Alkylacetylglycerophosphatase inhibitor
0,757	0,024	Alkenylglycerophosphocholine hydrolase inhibitor

0,745	0,013	JAK2 expression inhibitor
0,733	0,003	Antineoplastic (non-Hodgkin's lymphoma)
0,746	0,018	Beta-adrenergic receptor kinase inhibitor
0,746	0,018	G-protein-coupled receptor kinase inhibitor
0,753	0,030	Antieczematic
0,727	0,004	Imidazoline receptor agonist
0,764	0,044	Aspulvinone dimethylallyltransferase inhibitor
0,730	0,018	Lysase inhibitor
0,717	0,008	Glucan 1,4-alpha-maltotriohydrolase inhibitor
0,744	0,036	CYP2J substrate
0,702	0,013	27-Hydroxycholesterol 7alpha-monooxygenase inhibitor
0,729	0,058	Ubiquinol-cytochrome-c reductase inhibitor
0,703	0,032	CYP2J2 substrate
0,701	0,034	Nicotinic alpha6beta3beta4alpha5 receptor antagonist
0,679	0,012	Vasoprotector
0,665	0,008	CYP2A4 substrate
0,686	0,036	Sugar-phosphatase inhibitor
0,673	0,029	5-O-(4-coumaroyl)-D-quinic acid 3'-monooxygenase inhibitor
0,667	0,024	HIF1A expression inhibitor
0,637	0,003	Dementia treatment
0,692	0,060	Mucosubstances protector
0,655	0,024	Phosphatase inhibitor
0,637	0,011	Cardiovascular analeptic
0,633	0,008	Dolichyl-diphosphooligosaccharide-protein glycotransferase inhibitor
0,628	0,005	Antineoplastic (ovarian cancer)
0,625	0,009	H ⁺ -exporting ATPase inhibitor
0,651	0,036	TP53 expression enhancer
0,668	0,062	CDP-glycerol glycerophosphotransferase inhibitor
0,637	0,032	Ribulose-phosphate 3-epimerase inhibitor
0,619	0,021	Respiratory analeptic
0,620	0,023	CYP3A2 substrate
0,654	0,060	Membrane permeability inhibitor
0,646	0,054	Polyporopepsin inhibitor
0,601	0,011	Platelet adhesion inhibitor
0,601	0,012	Carminative
0,615	0,035	Antidyskinetic
0,606	0,026	Apoptosis agonist

0,598	0,022	Vasodilator, peripheral
0,596	0,020	CYP3A1 substrate
0,588	0,014	CYP3A3 substrate
0,598	0,025	CYP3A5 substrate
0,632	0,061	Antineurotic
0,601	0,030	Cytoprotectant
0,593	0,025	Acetylcholine neuromuscular blocking agent
0,582	0,016	Neurotransmitter antagonist
0,579	0,015	Antiviral (Influenza)
0,572	0,008	Antimetastatic
0,623	0,059	CYP2H substrate
0,608	0,046	Nicotinic alpha2beta2 receptor antagonist
0,570	0,013	Antineoplastic (breast cancer)
0,584	0,027	Membrane integrity antagonist
0,574	0,021	CYP3A4 inducer
0,557	0,007	Imidazoline I1 receptor agonist
0,571	0,025	Ovulation inhibitor
0,577	0,033	Glucan endo-1,3-beta-D-glucosidase inhibitor
0,565	0,021	CYP3A inducer
0,552	0,013	Peptidoglycan glycosyltransferase inhibitor
0,556	0,021	CYP2A2 substrate
0,563	0,028	Antiviral (Picornavirus)
0,543	0,009	Antineoplastic (solid tumors)
0,556	0,022	CYP2A1 substrate
0,555	0,021	Antipruritic, allergic
0,565	0,036	Gastrin inhibitor
0,557	0,037	Feruloyl esterase inhibitor
0,545	0,028	Linoleate diol synthase inhibitor
0,538	0,026	Alkenylglycerophosphoethanolamine hydrolase inhibitor
0,531	0,020	Cyclic AMP agonist
0,521	0,011	Myc inhibitor
0,512	0,005	Antineoplastic (brain cancer)
0,519	0,014	Antihelmintic (Nematodes)
0,519	0,014	Caspase 8 stimulant
0,512	0,009	Endothelial growth factor antagonist
0,530	0,032	CYP2C8 substrate
0,511	0,013	Antineoplastic (lung cancer)

0,521	0,025	Antinociceptive
0,505	0,011	CYP3A7 substrate
0,510	0,018	CYP2D2 inhibitor
0,543	0,053	CYP3A4 substrate
0,492	0,005	Antineoplastic (pancreatic cancer)
0,500	0,015	Membrane permeability enhancer
0,519	0,034	Cholesterol antagonist
0,535	0,052	CYP3A substrate
0,511	0,030	Analeptic
0,518	0,039	Immunosuppressant
0,483	0,005	Antineoplastic (small cell lung cancer)
0,509	0,031	CYP2B5 substrate
0,562	0,084	Membrane integrity agonist
0,530	0,053	Platelet aggregation stimulant
0,513	0,039	Adenomatous polyposis treatment
0,521	0,051	UDP-N-acetylglucosamine 4-epimerase inhibitor
0,493	0,023	Acetylgalactosaminyl-O-glycosyl-glycoprotein beta-1,3-N-acetylglucosaminyltransferase inhibitor
0,495	0,026	Steroid N-acetylglucosaminyltransferase inhibitor
0,498	0,030	TNF expression inhibitor
0,485	0,018	CYP2A11 substrate
0,481	0,017	CYP2C9 inducer
0,477	0,012	Prostate cancer treatment
0,467	0,004	Vascular dementia treatment
0,508	0,047	Alopecia treatment
0,493	0,032	Histamine release stimulant
0,485	0,030	Caspase 3 stimulant
0,479	0,026	CYP2D15 substrate
0,470	0,019	P-glycoprotein substrate
0,515	0,065	Complement factor D inhibitor
0,471	0,026	CYP17 inhibitor
0,483	0,038	Antipruritic
0,471	0,031	AR expression inhibitor
0,470	0,033	Cyclohexanone monooxygenase inhibitor
0,489	0,055	Glucan endo-1,6-beta-glucosidase inhibitor
0,481	0,046	Ecdysone 20-monooxygenase inhibitor
0,502	0,068	Protein-disulfide reductase (glutathione) inhibitor
0,441	0,010	Endo-1,3(4)-beta-glucanase inhibitor

0,460	0,029	Gonadotropin antagonist
0,516	0,086	Glutamyl endopeptidase II inhibitor
0,513	0,084	Fusarinine-C ornithinesterase inhibitor
0,466	0,039	Antiviral (Rhinovirus)
0,491	0,065	General pump inhibitor
0,464	0,039	Mannan endo-1,4-beta-mannosidase inhibitor
0,452	0,028	Alcohol dehydrogenase (acceptor) inhibitor
0,436	0,014	Pediculicide
0,448	0,026	N-acylmannosamine kinase inhibitor
0,454	0,032	Antiprotozoal (Leishmania)
0,440	0,022	DELTA14-sterol reductase inhibitor
0,433	0,016	CYP2B11 substrate
0,456	0,040	Antisecretoric
0,426	0,010	Antineoplastic (melanoma)
0,497	0,082	Nicotinic alpha4beta4 receptor agonist
0,452	0,037	MMP9 expression inhibitor
0,496	0,081	Calcium channel (voltage-sensitive) activator
0,476	0,062	Chloride peroxidase inhibitor
0,437	0,023	RELA expression inhibitor
0,432	0,018	Vanilloid 1 agonist
0,445	0,034	Rubredoxin-NAD ⁺ reductase inhibitor
0,461	0,051	Exoribonuclease II inhibitor
0,452	0,042	Apyrase inhibitor
0,446	0,037	Pullulanase inhibitor
0,426	0,017	Oxidizing agent
0,462	0,054	Erythropoiesis stimulant
0,439	0,031	Leukopoiesis inhibitor
0,481	0,074	NADPH peroxidase inhibitor
0,437	0,030	Dextranase inhibitor
0,427	0,022	CYP7 inhibitor
0,414	0,009	CYP2D1 substrate
0,411	0,008	Nicotinic alpha4beta2 receptor antagonist
0,425	0,023	CYP2A5 substrate
0,417	0,015	Antiprotozoal (Coccidial)
0,410	0,010	Steroid synthesis inhibitor
0,436	0,038	Bilirubin oxidase inhibitor
0,479	0,082	Oxidoreductase inhibitor

0,432	0,036	Menopausal disorders treatment
0,396	0,005	Alpha-pinene-oxide decyclase inhibitor
0,407	0,017	RNA directed DNA polymerase inhibitor
0,428	0,043	Glyoxylate reductase inhibitor
0,464	0,081	Macrophage colony stimulating factor agonist
0,394	0,016	CYP2B10 substrate
0,402	0,027	Hydroxylamine reductase (NADH) inhibitor
0,380	0,006	Antineoplastic (renal cancer)
0,482	0,109	Kidney function stimulant
0,412	0,041	Aspergillopepsin I inhibitor
0,427	0,058	Polarisation stimulant
0,391	0,023	CDP-diacylglycerol-glycerol-3-phosphate 3-phosphatidyltransferase inhibitor
0,409	0,043	Phosphoinositide 5-phosphatase inhibitor
0,401	0,035	Antiviral (Herpes)
0,407	0,041	Cytostatic
0,382	0,017	Opioid dependency treatment
0,489	0,125	Fibrinolytic
0,408	0,044	Glycerol-3-phosphate oxidase inhibitor
0,381	0,017	Antipruritic, non-allergic
0,408	0,045	GABA aminotransferase inhibitor
0,405	0,044	EIF4E expression inhibitor
0,373	0,013	Glucan 1,6-alpha-glucosidase inhibitor
0,435	0,076	GST A substrate
0,375	0,017	Alkylglycerophosphoethanolamine phosphodiesterase inhibitor
0,373	0,017	Acaricide
0,430	0,075	1,4-Lactonase inhibitor
0,364	0,010	Microtubule formation inhibitor
0,401	0,050	All-trans-retinyl-palmitate hydrolase inhibitor
0,374	0,023	CYP2C6 substrate
0,400	0,050	Antifungal
0,403	0,053	Cytochrome P450 stimulant
0,376	0,026	Protein-Npi-phosphohistidine-sugar phosphotransferase inhibitor
0,364	0,015	Maltose-transporting ATPase inhibitor
0,376	0,026	GST M substrate
0,445	0,097	Chlordecone reductase inhibitor
0,381	0,033	UGT2B4 substrate
0,359	0,012	MAP kinase kinase 4 inhibitor

0,363	0,016	UGT2B17 substrate
0,403	0,056	Na ⁺ -transporting two-sector ATPase inhibitor
0,424	0,078	Leukopoiesis stimulant
0,369	0,023	Antitussive
0,384	0,038	Phosphatidylinositol diacylglycerol-lyase inhibitor
0,414	0,070	4-Nitrophenol 2-monooxygenase inhibitor
0,404	0,061	Formaldehyde transketolase inhibitor
0,411	0,069	CYP2C substrate
0,396	0,054	Simian immunodeficiency virus proteinase inhibitor
0,407	0,065	Aldehyde oxidase inhibitor
0,382	0,041	Albendazole monooxygenase inhibitor
0,412	0,073	Trimethylamine-oxide aldolase inhibitor
0,366	0,027	RNA synthesis inhibitor
0,355	0,016	Antiperistaltic
0,407	0,070	Lipoprotein lipase inhibitor
0,397	0,060	HMOX1 expression enhancer
0,371	0,035	CYP2G1 substrate
0,393	0,058	N-acetylneuraminate 7-O(or 9-O)-acetyltransferase inhibitor
0,390	0,057	Antimyopathies
0,421	0,089	Limulus clotting factor B inhibitor
0,343	0,012	Hydroxysteroid dehydrogenase inhibitor
0,343	0,013	Cycloartenol synthase inhibitor
0,370	0,041	Undecaprenyldiphospho-muramoylpentapeptide beta-N-acetylglucosaminyltransferase inhibitor
0,353	0,025	Sclerosant
0,375	0,049	CYP2C11 substrate
0,332	0,006	Retinyl-palmitate esterase inhibitor
0,383	0,058	Prostaglandin-E2 9-reductase inhibitor
0,357	0,031	Sorbitol-6-phosphate 2-dehydrogenase inhibitor
0,412	0,087	Lipid metabolism regulator
0,378	0,055	Malate oxidase inhibitor
0,448	0,125	Pseudolysin inhibitor
0,398	0,075	Beta glucuronidase inhibitor
0,334	0,012	Antineoplastic (liver cancer)
0,410	0,090	Venombin AB inhibitor
0,338	0,017	Antineoplastic (non-small cell lung cancer)
0,360	0,040	Hepatoprotectant
0,365	0,045	Mannose isomerase inhibitor

0,387	0,070	3-Hydroxybenzoate 6-monooxygenase inhibitor
0,356	0,040	Opioid kappa 3 receptor antagonist
0,341	0,026	Thiamine-triphosphatase inhibitor
0,439	0,126	Glycosylphosphatidylinositol phospholipase D inhibitor
0,368	0,055	Sulfite dehydrogenase inhibitor
0,354	0,040	Fructan beta-fructosidase inhibitor
0,395	0,083	Pterin deaminase inhibitor
0,342	0,030	DNA ligase (ATP) inhibitor
0,332	0,020	Antimitotic
0,341	0,033	N-(long-chain-acyl)ethanolamine deacylase inhibitor
0,333	0,025	Vitamin-K-epoxide reductase (warfarin-insensitive) inhibitor
0,381	0,073	Insulin promoter
0,370	0,063	Plastoquinol-plastocyanin reductase inhibitor
0,312	0,005	Nitric oxide scavenger
0,350	0,043	Cyclomaltodextrinase inhibitor
0,395	0,088	Lysine 2,3-aminomutase inhibitor
0,331	0,026	UGT2B28 substrate
0,395	0,089	Pin1 inhibitor
0,329	0,024	Fumarate reductase (NADH) inhibitor
0,354	0,049	4-Coumarate-CoA ligase inhibitor
0,375	0,070	CYP2D6 substrate
0,372	0,068	CYP2D substrate
0,369	0,066	Transcription factor stimulant
0,369	0,066	Transcription factor NF kappa B stimulant
0,335	0,032	Hyaluronic acid agonist
0,385	0,083	Hydrogen dehydrogenase inhibitor
0,338	0,037	DNA polymerase I inhibitor
0,412	0,111	Electron-transferring-flavoprotein dehydrogenase inhibitor
0,371	0,070	L-glutamate oxidase inhibitor
0,321	0,020	Sterol 3-beta-glucosyltransferase inhibitor
0,463	0,162	Nootropic
0,311	0,012	UGT1A5 substrate
0,305	0,006	Antineoplastic (gastric cancer)
0,343	0,044	Glycerol-3-phosphate dehydrogenase inhibitor
0,338	0,041	Clavamate synthase inhibitor
0,339	0,043	Gestagen antagonist
0,305	0,009	Deoxyribonuclease I inhibitor

0,361	0,066	CYP2A substrate
0,310	0,015	Insecticide
0,344	0,049	Eye irritation, inactive
0,300	0,006	Antineoplastic (thyroid cancer)
0,384	0,090	Fibrinogen receptor antagonist
0,324	0,031	CYP2A3 substrate
0,307	0,014	Ligase inhibitor
0,391	0,099	Phosphatidylcholine-retinol O-acyltransferase inhibitor
0,319	0,027	Dopamine release stimulant
0,339	0,047	Hematopoietic inhibitor
0,323	0,032	Calcium channel activator
0,300	0,009	Antineoplastic, alkylator
0,330	0,039	Proliferative diseases treatment
0,346	0,055	D-lactaldehyde dehydrogenase inhibitor
0,328	0,038	Shikimate O-hydroxycinnamoyltransferase inhibitor
0,344	0,054	Formate-dihydrofolate ligase inhibitor
0,317	0,029	Licheninase inhibitor
0,301	0,015	Antineoplastic (endocrine cancer)
0,315	0,028	Protein synthesis inhibitor
0,327	0,041	Morphine 6-dehydrogenase inhibitor
0,317	0,031	Antineoplastic alkaloid
0,366	0,081	Pro-opiomelanocortin converting enzyme inhibitor
0,325	0,040	Antitoxic
0,296	0,011	Transactivator transcription protein inhibitor
0,408	0,123	Omptin inhibitor
0,357	0,073	NAD(P) ⁺ -arginine ADP-ribosyltransferase inhibitor
0,367	0,084	CYP2C9 substrate
0,317	0,035	Flavin-containing monooxygenase inhibitor
0,298	0,018	Aldosterone antagonist
0,331	0,051	Para amino benzoic acid antagonist
0,353	0,073	CYP2C19 inducer
0,350	0,070	Mucinamylserine mucinaminidase inhibitor
0,315	0,035	Adrenaline release stimulant
0,294	0,014	ATPase inhibitor
0,324	0,045	DNA synthesis inhibitor
0,341	0,062	Sigma receptor agonist
0,337	0,059	Anesthetic general

0,312	0,035	Chemopreventive
0,349	0,071	CYP2E1 inducer
0,380	0,103	Carboxypeptidase Taq inhibitor
0,354	0,078	Thymidylate 5'-phosphatase inhibitor
0,290	0,013	Antineoplastic (squamous cell carcinoma)
0,357	0,082	CYP4A11 substrate
0,341	0,066	CYP19A1 expression inhibitor
0,292	0,018	Glycerone-phosphate O-acyltransferase inhibitor
0,387	0,114	Thromboxane B2 antagonist
0,336	0,063	Phosphopantothenoylcysteine decarboxylase inhibitor
0,307	0,035	Antineoplastic (colorectal cancer)
0,318	0,046	NF-E2-related factor 2 stimulant
0,285	0,013	GST T substrate
0,285	0,013	GST T1-1 substrate
0,297	0,025	Undecaprenyl-diphosphatase inhibitor
0,354	0,083	Malate dehydrogenase (acceptor) inhibitor
0,289	0,020	Tropinesterase inhibitor
0,317	0,047	Cholestanetriol 26-monooxygenase inhibitor
0,302	0,033	Sweetener
0,319	0,050	Antiparasitic
0,385	0,117	Mannotetraose 2-alpha-N-acetylglucosaminyltransferase inhibitor
0,311	0,043	Cutinase inhibitor
0,316	0,049	Taurine-2-oxoglutarate transaminase inhibitor
0,277	0,010	Interferon antagonist
0,299	0,033	Antineoplastic (colon cancer)
0,279	0,014	UGT2B10 substrate
0,348	0,084	Centromere associated protein inhibitor
0,358	0,095	Fragilysin inhibitor
0,273	0,010	Protein synthesis stimulant
0,351	0,089	5 Hydroxytryptamine release stimulant
0,276	0,015	Melanin inhibitor
0,294	0,034	Retinoprotector
0,307	0,048	ICAM1 expression inhibitor
0,277	0,017	Antineoplastic (carcinoma)
0,294	0,034	Galactolipase inhibitor
0,373	0,114	MAP kinase stimulant
0,345	0,086	Manganese peroxidase inhibitor

0,281	0,024	Alkylator
0,340	0,083	Gluconate 5-dehydrogenase inhibitor
0,294	0,038	Aspergillopepsin II inhibitor
0,265	0,009	Interferon gamma antagonist
0,276	0,022	CYP2A10 substrate
0,299	0,045	NOS2 expression inhibitor
0,370	0,116	Preneoplastic conditions treatment
0,298	0,044	Xylan endo-1,3-beta-xylosidase inhibitor
0,292	0,039	Glycine dehydrogenase (decarboxylating) inhibitor
0,265	0,014	Estradiol 17alpha-dehydrogenase inhibitor
0,330	0,078	Acetylesterase inhibitor
0,277	0,025	Cyclooxygenase substrate
0,315	0,064	Antinephritic
0,319	0,068	3-Cyanoalanine hydratase inhibitor
0,290	0,040	Alpha-N-acetylglucosaminidase inhibitor
0,272	0,024	Bile-salt sulfotransferase inhibitor
0,263	0,015	4-Alpha-glucanotransferase inhibitor
0,304	0,056	Anticarcinogenic
0,276	0,029	Antineoplastic (lymphoma)
0,266	0,019	Gastrointestinal motility stimulant
0,270	0,024	Cholesterol oxidase inhibitor
0,304	0,057	Antiviral (Poxvirus)
0,343	0,097	Fatty-acyl-CoA synthase inhibitor
0,349	0,103	CYP2D16 substrate
0,322	0,077	CYP2B6 substrate
0,289	0,044	Signal peptidase I inhibitor
0,250	0,005	Pregnane X receptor agonist
0,318	0,073	Peptide-N4-(N-acetyl-beta-glucosaminy)asparagine amidase inhibitor
0,269	0,025	Rhizopuspepsin inhibitor
0,314	0,070	Nitrite reductase (NO-forming) inhibitor
0,329	0,086	Intermittent claudication treatment
0,302	0,059	Glycolate dehydrogenase inhibitor
0,341	0,099	Biotinidase inhibitor
0,266	0,025	Antitussive, narcotic
0,289	0,048	Analgesic stimulant
0,299	0,058	Poly(beta-D-mannuronate) lyase inhibitor
0,263	0,023	UGT2B9 substrate

0,326	0,086	Antithrombotic
0,242	0,003	Anesthetic inhalation
0,252	0,014	Antirickettsial
0,320	0,082	CYP2A6 substrate
0,247	0,010	Cyclooxygenase 1 substrate
0,282	0,045	Anthelmintic
0,288	0,052	Yeast ribonuclease inhibitor
0,315	0,078	Radioprotector
0,377	0,140	5 Hydroxytryptamine uptake stimulant
0,271	0,037	Bisphosphoglycerate mutase inhibitor
0,256	0,022	Galacturan 1,4-alpha-galacturonidase inhibitor
0,294	0,061	Glucan 1,4-alpha-maltotetraohydrolase inhibitor
0,288	0,055	Ethanolamine-phosphate cytidyltransferase inhibitor
0,296	0,063	Lysyl oxidase inhibitor
0,365	0,135	NADPH-cytochrome-c2 reductase inhibitor
0,336	0,106	Arginine 2-monooxygenase inhibitor
0,260	0,030	Antimycoplasmal
0,260	0,031	Cholesterol synthesis inhibitor
0,341	0,112	Radiosensitizer
0,259	0,030	Vanilloid agonist
0,255	0,027	Antineoplastic (bone cancer)
0,326	0,098	Sphinganine kinase inhibitor
0,278	0,050	Raynaud's phenomenon treatment
0,305	0,078	H ⁺ -transporting two-sector ATPase inhibitor
0,272	0,045	Phospholipase A1 inhibitor
0,316	0,090	(R)-Pantolactone dehydrogenase (flavin) inhibitor
0,330	0,105	Interleukin 2 agonist
0,255	0,031	CYP4F2 substrate
0,310	0,085	CYP2F1 substrate
0,246	0,021	UGT2B18 substrate
0,331	0,108	Alcohol O-acetyltransferase inhibitor
0,250	0,028	CYP2C8 inducer
0,308	0,086	Mediator release inhibitor
0,290	0,069	Sulfite oxidase inhibitor
0,295	0,074	IgA-specific serine endopeptidase inhibitor
0,354	0,134	Fructose 5-dehydrogenase inhibitor
0,302	0,083	Chitinase inhibitor

0,330	0,111	Nucleotide metabolism regulator
0,356	0,137	Octopamine antagonist
0,352	0,133	Thioredoxin inhibitor
0,254	0,036	Interleukin 6 antagonist
0,284	0,066	Antibacterial
0,245	0,027	GABA B receptor agonist
0,242	0,025	Glucosyl transferase inhibitor
0,299	0,082	Adenylyl-sulfate reductase inhibitor
0,249	0,033	1,4-Alpha-glucan branching enzyme inhibitor
0,275	0,060	Spasmolytic, Papaverin-like
0,219	0,005	Interleukin 10 antagonist
0,297	0,083	Antiinflammatory, ophthalmic
0,290	0,077	UGT1A9 substrate
0,291	0,078	Antiinflammatory, intestinal
0,290	0,076	Antiprotozoal (Amoeba)
0,335	0,121	Spasmolytic, urinary
0,257	0,044	UGT2B7 substrate
0,286	0,073	4-Nitrophenylphosphatase inhibitor
0,233	0,021	Chitin synthase inhibitor
0,254	0,042	Styrene-oxide isomerase inhibitor
0,311	0,100	Phenol O-methyltransferase inhibitor
0,235	0,023	Endoglycosylceramidase inhibitor
0,237	0,026	Testosterone 17beta-dehydrogenase inhibitor
0,267	0,058	Transcription factor NF kappa A inhibitor
0,300	0,090	Fucosterol-epoxide lyase inhibitor
0,282	0,073	Thiosulfate dehydrogenase inhibitor
0,344	0,135	Oxygen scavenger
0,366	0,157	Phthalate 4,5-dioxygenase inhibitor
0,256	0,047	Phosphoenolpyruvate mutase inhibitor
0,267	0,059	Levanase inhibitor
0,255	0,047	N-acetyllactosaminide beta-1,3-N-acetylglucosaminyltransferase inhibitor
0,292	0,085	ADP-thymidine kinase inhibitor
0,280	0,073	2-Haloacid dehalogenase inhibitor
0,232	0,026	CYP4B substrate
0,297	0,091	Antiviral (Adenovirus)
0,241	0,035	CYP1B substrate
0,301	0,096	1-Acylglycerol-3-phosphate O-acyltransferase inhibitor

0,280	0,075	Cytochrome-b5 reductase inhibitor
0,212	0,009	4-Carboxymethyl-4-methylbutenolide mutase inhibitor
0,302	0,100	Antiinfective
0,263	0,060	2,3,4,5-Tetrahydropyridine-2,6-dicarboxylate N-succinyltransferase inhibitor
0,230	0,028	Antihypotensive
0,306	0,104	Histidine N-acetyltransferase inhibitor
0,306	0,105	Calcium regulator
0,257	0,055	Chaperonin ATPase inhibitor
0,247	0,047	Anthranilate-CoA ligase inhibitor
0,211	0,011	CYP3A5 inducer
0,309	0,109	Cyclic AMP phosphodiesterase inhibitor
0,226	0,026	Arachidonic acid antagonist
0,271	0,073	CYP2C29 substrate
0,249	0,051	UGT1A4 substrate
0,244	0,047	Dynein ATPase inhibitor
0,281	0,085	Chitosanase inhibitor
0,250	0,053	Polyribonucleotide nucleotidyltransferase inhibitor
0,244	0,049	Polygalacturonase inhibitor
0,348	0,153	Phospholipid-translocating ATPase inhibitor
0,224	0,029	Ferredoxin-NADP+ reductase inhibitor
0,211	0,016	Hypoxia inducible factor 1 alpha inhibitor
0,222	0,028	Protein kinase stimulant
0,279	0,085	tRNA-pseudouridine synthase I inhibitor
0,328	0,133	2-Dehydropantoate 2-reductase inhibitor
0,212	0,017	Choloylglycine hydrolase inhibitor
0,218	0,024	Adenylate cyclase inhibitor
0,217	0,023	Contraceptive female
0,232	0,039	UGT2B15 substrate
0,266	0,074	Antiviral (Influenza A)
0,243	0,051	Cellulose 1,4-beta-cellobiosidase inhibitor
0,209	0,017	Corticosteroid antagonist
0,249	0,058	Oxytocic
0,215	0,023	Riboflavin phosphotransferase inhibitor
0,230	0,039	Lymphocytopoiesis inhibitor
0,243	0,052	D-alanine 2-hydroxymethyltransferase inhibitor
0,277	0,086	Limulus clotting factor C inhibitor
0,242	0,053	Myeloblastin inhibitor

0,274	0,086	Lysostaphin inhibitor
0,228	0,039	Mucolytic
0,300	0,111	Prion diseases treatment
0,226	0,037	Antihematotoxic
0,239	0,051	Polyneuridine-aldehyde esterase inhibitor
0,244	0,056	Alpha-1,6-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase inhibitor
0,304	0,116	Vasodilator, coronary
0,341	0,153	Glycerol-ether monooxygenase inhibitor
0,298	0,111	Muscular dystrophy treatment
0,317	0,130	RNA-directed RNA polymerase inhibitor
0,250	0,063	Cyclic AMP modulator
0,200	0,014	Adenylate cyclase stimulant
0,279	0,093	Nitrite reductase [NAD(P)H] inhibitor
0,232	0,045	Expectorant
0,229	0,043	Glucan 1,4-beta-glucosidase inhibitor
0,294	0,108	Cyanoalanine nitrilase inhibitor
0,216	0,031	L-iduronidase inhibitor
0,277	0,093	Methylenetetrahydrofolate reductase (NADPH) inhibitor
0,189	0,004	Phosphatidylinositol 3-kinase stimulant
0,222	0,038	Antineoplastic (glioblastoma multiforme)
0,200	0,016	Alpha-L-rhamnosidase inhibitor
0,245	0,060	CYP2B2 substrate
0,279	0,095	Creatininase inhibitor
0,208	0,024	CYP4B1 substrate
0,258	0,075	Phospholipase C inhibitor
0,227	0,044	Lipotropic
0,279	0,097	Enteropeptidase inhibitor
0,211	0,029	Glutamate (mGluR5) agonist
0,248	0,066	Lactose synthase inhibitor
0,277	0,096	3-Phytase inhibitor
0,350	0,170	CYP2C8 inhibitor
0,250	0,070	Beta-carotene 15,15'-monooxygenase inhibitor
0,250	0,071	Glyoxylate oxidase inhibitor
0,241	0,063	Oryzin inhibitor
0,293	0,115	Glucose oxidase inhibitor
0,181	0,003	Inositol 1,4,5-triphosphate receptor antagonist
0,290	0,112	Dehydro-L-gulonate decarboxylase inhibitor

0,235	0,058	Choleretic
0,214	0,038	ADP-ribosylarginine hydrolase inhibitor
0,211	0,035	GST M1-1 substrate
0,298	0,122	Superoxide dismutase inhibitor
0,300	0,125	Cl--transporting ATPase inhibitor
0,183	0,009	Galactosylceramidase inhibitor
0,241	0,067	Peroxidase substrate
0,230	0,057	Anesthetic
0,188	0,015	CYP19 substrate
0,225	0,052	P-glycoprotein inhibitor
0,202	0,030	Protein-glucosylgalactosylhydroxylysine glucosidase inhibitor
0,288	0,116	MAP3K5 inhibitor
0,205	0,033	Thioredoxin reductase inhibitor
0,233	0,062	CYP1A1 inhibitor
0,234	0,064	ATP-binding cassette A1 stimulant
0,220	0,050	Alpha-amylase inhibitor
0,222	0,052	Sedoheptulose-bisphosphatase inhibitor
0,260	0,091	Glutamate-tRNA ligase inhibitor
0,248	0,079	3C-like protease (Human coronavirus) inhibitor
0,215	0,046	2-Acylglycerol O-acyltransferase inhibitor
0,243	0,075	Cell wall biosynthesis inhibitor
0,296	0,128	Amine dehydrogenase inhibitor
0,187	0,019	Isoamylase inhibitor
0,252	0,085	CYP1A1 substrate
0,211	0,043	Laxative
0,218	0,051	Severe acute respiratory syndrome treatment
0,179	0,013	Antitreponemal
0,196	0,030	SMN2 expression enhancer
0,247	0,081	Antiviral (CMV)
0,252	0,086	Indanol dehydrogenase inhibitor
0,184	0,019	Guanylate cyclase stimulant
0,240	0,075	Quinoprotein glucose dehydrogenase inhibitor
0,227	0,063	Ubiquitin thiolesterase inhibitor
0,229	0,064	3-Methylbutanal reductase inhibitor
0,307	0,144	Nicotine dehydrogenase inhibitor
0,239	0,076	Antiprotozoal (Trichomonas)
0,201	0,038	2-Dehydropantoate aldolase inhibitor

0,232	0,070	Aminomuconate-semialdehyde dehydrogenase inhibitor
0,204	0,041	Phosphoenolpyruvate-protein phosphotransferase inhibitor
0,177	0,014	UGT2B11 substrate
0,222	0,059	D-threo-aldose 1-dehydrogenase inhibitor
0,293	0,131	Aspartate-phenylpyruvate transaminase inhibitor
0,263	0,102	P-benzoquinone reductase (NADPH) inhibitor
0,235	0,074	UGT1A6 substrate
0,202	0,040	Antineoplastic (cervical cancer)
0,249	0,089	2-Hydroxymuconate-semialdehyde hydrolase inhibitor
0,202	0,042	Glycerol-1-phosphatase inhibitor
0,239	0,079	Glutathione dehydrogenase (ascorbate) inhibitor
0,234	0,074	Bisphosphoglycerate phosphatase inhibitor
0,229	0,070	Pseudouridylate synthase inhibitor
0,284	0,125	Leukotriene-C4 synthase inhibitor
0,165	0,007	Acetylcholine M3 receptor agonist
0,170	0,012	Shab potassium channel blocker
0,281	0,123	Polyamine-transporting ATPase inhibitor
0,200	0,043	Alkene monooxygenase inhibitor
0,237	0,080	Linoleoyl-CoA desaturase inhibitor
0,240	0,083	CYP2E1 substrate
0,210	0,053	Growth stimulant
0,207	0,050	Menstruation disorders treatment
0,228	0,072	1,2- α -L-fucosidase inhibitor
0,220	0,063	Rhodotorulapepsin inhibitor
0,207	0,051	Alpha-glucuronidase inhibitor
0,258	0,102	Isopenicillin-N epimerase inhibitor
0,228	0,072	N-acetyllactosamine synthase inhibitor
0,216	0,061	Mannitol-1-phosphatase inhibitor
0,209	0,054	Plasmanylethanolamine desaturase inhibitor
0,220	0,066	Aromatic-hydroxylamine O-acetyltransferase inhibitor
0,215	0,061	3-Demethylubiquinone-9 3-O-methyltransferase inhibitor
0,225	0,071	Alcohol dehydrogenase [NAD(P)+] inhibitor
0,247	0,093	Aspergillus nuclease S1 inhibitor
0,195	0,042	Ganglioside galactosyltransferase inhibitor
0,255	0,102	N-formylmethionyl-peptidase inhibitor
0,167	0,014	DELTA24-sterol reductase inhibitor
0,177	0,024	Glycosylphosphatidylinositol diacylglycerol-lyase inhibitor

0,219	0,066	Prunasin beta-glucosidase inhibitor
0,267	0,115	Prostaglandin-A1 DELTA-isomerase inhibitor
0,301	0,148	Fibrolase inhibitor
0,188	0,037	Phosphatidate cytidyltransferase inhibitor
0,290	0,139	Nitrate reductase (cytochrome) inhibitor
0,314	0,163	Aminobutyraldehyde dehydrogenase inhibitor
0,159	0,008	Aldose 1-epimerase inhibitor
0,237	0,087	Antihypercholesterolemic
0,209	0,059	P-glycoprotein 1 inhibitor
0,254	0,104	CYP4A substrate
0,193	0,043	Methyltransferase substrate
0,236	0,086	CYP2E substrate
0,181	0,032	Pectin lyase inhibitor
0,183	0,033	Antibiotic
0,173	0,024	Beta-glucosidase inhibitor
0,300	0,152	(R)-6-hydroxynicotine oxidase inhibitor
0,227	0,079	Antidote
0,188	0,041	Cellulase inhibitor
0,183	0,036	Skin whitener
0,185	0,038	Diacylglycerol cholinephosphotransferase inhibitor
0,235	0,089	Dipeptidase E inhibitor
0,196	0,050	Antineoplastic (bladder cancer)
0,265	0,119	(S)-6-hydroxynicotine oxidase inhibitor
0,277	0,131	Cancer associated disorders treatment
0,150	0,005	Alpha-mannosidase inhibitor
0,197	0,052	Aldehyde dehydrogenase (NADP+) inhibitor
0,208	0,063	UGT1A1 substrate
0,190	0,045	CYP2B18 substrate
0,251	0,106	4-Methoxybenzoate monooxygenase (O-demethylating) inhibitor
0,184	0,039	Valine-tRNA ligase inhibitor
0,165	0,021	Narcotic antagonist
0,198	0,054	NAD+ synthase (glutamine-hydrolysing) inhibitor
0,204	0,060	Retinol dehydrogenase inhibitor
0,171	0,028	Trehalose-phosphatase inhibitor
0,203	0,060	Inorganic diphosphatase inhibitor
0,176	0,033	CYP19 inhibitor
0,169	0,027	Antineoplastic antibiotic

0,157	0,015	Testosterone agonist
0,180	0,038	Glycopeptide alpha-N-acetylgalactosaminidase inhibitor
0,151	0,010	Imidazoleglycerol-phosphate dehydratase inhibitor
0,285	0,145	Dimethylargininase inhibitor
0,258	0,118	4-Hydroxyproline epimerase inhibitor
0,158	0,018	Secretase stimulant
0,158	0,018	Secretase alpha stimulant
0,248	0,108	Urethanase inhibitor
0,241	0,102	Aldehyde dehydrogenase (pyrroloquinoline-quinone) inhibitor
0,176	0,037	Peristaltic stimulant
0,169	0,031	Alpha-N-acetylgalactosaminidase inhibitor
0,201	0,064	Antinaupathic
0,316	0,179	Diabetic neuropathy treatment
0,243	0,106	Peptide alpha-N-acetyltransferase inhibitor
0,164	0,027	Urolithiasis treatment
0,193	0,056	Maleate isomerase inhibitor
0,170	0,034	Cocain dependency treatment
0,282	0,146	Spermidine dehydrogenase inhibitor
0,188	0,052	Stromelysin 2 inhibitor
0,197	0,062	Aureolysin inhibitor
0,206	0,071	Antiparkinsonian, tremor relieving
0,161	0,025	Tubulin antagonist
0,236	0,101	CYP2C10 substrate
0,198	0,063	4-Hydroxybenzoate nonaprenyltransferase inhibitor
0,180	0,046	Allantoate deiminase inhibitor
0,147	0,013	Epoxide hydrolase substrate
0,181	0,047	Polar-amino-acid-transporting ATPase inhibitor
0,241	0,108	Vasodilator
0,148	0,014	CYP4F substrate
0,184	0,051	Pyruvate carboxylase inhibitor
0,197	0,064	Antianorexic
0,172	0,039	Histamine agonist
0,194	0,061	Serratia marcescens nuclease inhibitor
0,235	0,103	Thiamine pyridinylase inhibitor
0,173	0,041	Gaucher disease treatment
0,268	0,135	Retinoic acid metabolism inhibitor
0,228	0,096	Long-chain-aldehyde dehydrogenase inhibitor

0,158	0,026	Demethylsterigmatocystin 6-O-methyltransferase inhibitor
0,270	0,138	Tpr proteinase (<i>Porphyromonas gingivalis</i>) inhibitor
0,150	0,019	Rhodopsin kinase inhibitor
0,147	0,016	Mycodextranase inhibitor
0,195	0,064	Urate-ribonucleotide phosphorylase inhibitor
0,202	0,072	Lipocortins synthesis antagonist
0,256	0,126	Inotropic
0,134	0,004	Potassium channel Kv1.3 blocker
0,146	0,016	Leucine-tRNA ligase inhibitor
0,185	0,055	Laminaribiose phosphorylase inhibitor
0,303	0,173	2-Hydroxyquinoline 8-monooxygenase inhibitor
0,244	0,115	CYP2C19 substrate
0,168	0,039	Xylose isomerase inhibitor
0,137	0,009	Osmotic diuretic
0,230	0,102	Protein-arginine deiminase inhibitor
0,210	0,082	Pappalysin-1 inhibitor
0,175	0,048	Alpha-N-arabinofuranosidase inhibitor
0,187	0,060	Aryldialkylphosphatase inhibitor
0,215	0,087	UDP-glucuronosyltransferase substrate
0,163	0,036	Cholate-CoA ligase inhibitor
0,159	0,032	Sodium/bile acid cotransporter inhibitor
0,146	0,019	Anabolic
0,200	0,073	N-Acyl-D-aspartate deacylase inhibitor
0,136	0,010	Alpha-1,6-mannosyl-glycoprotein 6-beta-N-acetylglucosaminyltransferase inhibitor
0,182	0,056	Myosin-light-chain-phosphatase inhibitor
0,136	0,010	Glutamate (mGluR1) antagonist
0,141	0,016	Gentamicin 2''-nucleotidyltransferase inhibitor
0,178	0,053	Galactokinase inhibitor
0,219	0,094	Viral entry inhibitor
0,157	0,033	DNA directed DNA polymerase inhibitor
0,217	0,092	Antifibrinolytic
0,177	0,052	Ethanolaminephosphotransferase inhibitor
0,186	0,062	CYP1B1 substrate
0,161	0,037	NAD(P) ⁺ transhydrogenase (B-specific) inhibitor
0,233	0,110	Immunostimulant
0,129	0,006	Mannosidase inhibitor
0,159	0,036	(R)-limonene 6-monooxygenase inhibitor

0,150	0,028	Glutamate release inhibitor
0,272	0,151	S-formylglutathione hydrolase inhibitor
0,214	0,093	[acyl-carrier-protein] S-acetyltransferase inhibitor
0,152	0,031	Diacylglycerol kinase inhibitor
0,213	0,092	Salicylate 1-monooxygenase inhibitor
0,154	0,033	Glyceraldehyde-3-phosphate dehydrogenase (phosphorylating) inhibitor
0,134	0,014	Alpha glucosidase inhibitor
0,165	0,045	CDP-diacylglycerol-inositol 3-phosphatidyltransferase inhibitor
0,184	0,064	LDLR expression enhancer
0,174	0,055	Aspartate-tRNA ligase inhibitor
0,243	0,125	CYP2C18 substrate
0,153	0,034	D-arabinonolactone oxidase inhibitor
0,127	0,009	RNA-directed RNA polymerase stimulant
0,255	0,137	CYP2A8 substrate
0,199	0,082	Horriylsin inhibitor
0,179	0,062	Lactaldehyde reductase inhibitor
0,200	0,084	Polarisation inhibitor
0,198	0,081	Cyclopropane-fatty-acyl-phospholipid synthase inhibitor
0,297	0,180	Mucositis treatment
0,166	0,050	BRAF expression inhibitor
0,146	0,029	Succinate dehydrogenase inhibitor
0,133	0,017	Nicotinic receptor alpha7 subunit antagonist
0,185	0,069	UGT1A3 substrate
0,187	0,071	Glutathione peroxidase inhibitor
0,200	0,084	Diabetic nephropathy treatment
0,270	0,155	N-hydroxyarylamine O-acetyltransferase inhibitor
0,128	0,013	Ca ²⁺ -transporting ATPase inhibitor
0,185	0,070	Poly(alpha-L-guluronate) lyase inhibitor
0,127	0,012	Alpha,alpha-trehalose phosphorylase inhibitor
0,183	0,068	Vascular adhesion protein 1 inhibitor
0,128	0,013	Anticholelithogenic
0,173	0,059	3-Chloro-D-alanine dehydrochlorinase inhibitor
0,131	0,017	Alpha-L-fucosidase inhibitor
0,181	0,067	Gamma-butyrobetaine dioxygenase inhibitor
0,173	0,060	2-Haloacid dehalogenase (configuration-inverting) inhibitor
0,284	0,171	Pancreatic elastase inhibitor
0,133	0,020	Alternansucrase inhibitor

0,235	0,122	Spasmolytic
0,238	0,125	4-Hydroxymandelate oxidase inhibitor
0,196	0,085	Guanosine-3',5'-bis(diphosphate) 3'-diphosphatase inhibitor
0,161	0,050	UGT1A7 substrate
0,162	0,051	3-Ketovalidoxylamine C-N-lyase inhibitor
0,181	0,071	4-Chlorobenzoyl-CoA dehalogenase inhibitor
0,157	0,048	Contraceptive
0,118	0,008	Mannosyl-oligosaccharide 1,2-alpha-mannosidase inhibitor
0,191	0,081	Neurotrophic factor enhancer
0,135	0,025	Cytokine release inhibitor
0,150	0,041	Glycerol-3-phosphate O-acyltransferase inhibitor
0,198	0,089	CYP1A2 inducer
0,172	0,063	D-xylulose reductase inhibitor
0,176	0,067	Lipoxygenase substrate
0,116	0,007	Prostacyclin agonist
0,228	0,119	Age-related macular degeneration treatment
0,111	0,003	Antimitotic, Podophyllotoxin-like
0,208	0,100	Prolyl aminopeptidase inhibitor
0,239	0,130	Antimycobacterial
0,142	0,034	Nicotinamide-nucleotide adenyltransferase inhibitor
0,176	0,068	N-acetylneuraminate 4-O-acetyltransferase inhibitor
0,136	0,028	Retinol O-fatty-acyltransferase inhibitor
0,221	0,114	Lipid peroxidase inhibitor
0,194	0,087	2-Hydroxy-3-oxoadipate synthase inhibitor
0,200	0,093	Interleukin 10 agonist
0,201	0,094	UGT1A substrate
0,130	0,023	Protein kinase C stimulant
0,213	0,106	CYP2B substrate
0,202	0,095	Ceramide glucosyltransferase inhibitor
0,122	0,016	Heme oxygenase inhibitor
0,150	0,044	Endo-1,4-beta-xylanase inhibitor
0,223	0,117	Glutamine-phenylpyruvate transaminase inhibitor
0,162	0,057	HMG CoA synthase inhibitor
0,134	0,029	Beta-amylase inhibitor
0,177	0,072	UGT2B substrate
0,126	0,021	Squalene-hopene cyclase inhibitor
0,132	0,027	Squalene epoxidase inhibitor

0,249	0,145	Antiulcerative
0,130	0,026	Globoside alpha-N-acetylgalactosaminyltransferase inhibitor
0,194	0,090	GST P substrate
0,157	0,053	UGT1A8 substrate
0,130	0,027	Ribose-5-phosphate-ammonia ligase inhibitor
0,110	0,006	Glutamate (mGluR3) agonist
0,151	0,048	Carnitine dehydratase inhibitor
0,134	0,031	Deoxycytidine deaminase inhibitor
0,148	0,044	CYP26A substrate
0,189	0,086	2-Oxoaldehyde dehydrogenase (NADP+) inhibitor
0,117	0,014	Arabinogalactan endo-1,4-beta-galactosidase inhibitor
0,209	0,107	Phosphatidylcholine-sterol O-acyltransferase inhibitor
0,217	0,115	Adenosine regulator
0,163	0,061	Geranylgeranyl-diphosphate geranylgeranyltransferase inhibitor
0,215	0,113	Succinate-semialdehyde dehydrogenase [NAD(P)+] inhibitor
0,149	0,047	Transcription factor NF kappa B inhibitor
0,200	0,099	Benzaldehyde dehydrogenase (NADP+) inhibitor
0,138	0,038	Deoxyribonuclease X inhibitor
0,134	0,034	5 Hydroxytryptamine 4A antagonist
0,110	0,010	Glucose-6-phosphate translocase inhibitor
0,198	0,098	Tankyrase inhibitor
0,135	0,035	Glucan 1,3-beta-glucosidase inhibitor
0,151	0,052	2,2-Dialkylglycine decarboxylase (pyruvate) inhibitor
0,142	0,042	Tardive dyskinesia treatment
0,154	0,054	Pectate lyase inhibitor
0,238	0,139	Cardioprotectant
0,130	0,031	Isomaltulose synthase inhibitor
0,124	0,026	Phenylalanine-tRNA ligase inhibitor
0,188	0,090	Gastric antisecretory
0,106	0,008	3-Alpha-hydroxysteroid dehydrogenase (B-specific) inhibitor
0,155	0,058	VCAM1 expression inhibitor
0,153	0,057	UGT1A10 substrate
0,165	0,068	Antineoplastic (glioma)
0,115	0,018	Threonine-tRNA ligase inhibitor
0,234	0,137	Methylamine-glutamate N-methyltransferase inhibitor
0,157	0,061	Aldehyde oxidase substrate
0,157	0,061	Galactose oxidase inhibitor

0,106	0,010	1,3-Beta-glucan synthase inhibitor
0,171	0,076	2,3-Dihydroxyindole 2,3-dioxygenase inhibitor
0,211	0,115	Chloride channel activator
0,215	0,120	Transketolase inhibitor
0,229	0,134	Chenodeoxycholytaurine hydrolase inhibitor
0,159	0,065	SULT1E1 substrate
0,101	0,006	RNA agonist
0,182	0,087	Glutarate-semialdehyde dehydrogenase inhibitor
0,275	0,181	Antihypoxic
0,149	0,055	N-(5-amino-5-carboxypentanoyl)-L-cysteinyl-D-valine synthase inhibitor
0,173	0,079	Glycine C-acetyltransferase inhibitor
0,150	0,056	Calcium antagonist
0,127	0,034	Cholestenone 5alpha-reductase inhibitor
0,185	0,091	Skin irritation, inactive
0,161	0,068	Inulinase inhibitor
0,121	0,029	Phosphatidylglycerol-membrane-oligosaccharide glycerophosphotransferase inhibitor
0,128	0,036	Beta-D-fucosidase inhibitor
0,178	0,087	2-Enoate reductase inhibitor
0,157	0,065	Acetylenecarboxylate hydratase inhibitor
0,113	0,021	Alpha,alpha-trehalose phosphorylase (configuration-retaining) inhibitor
0,161	0,070	Cytochrome-b5 reductase substrate
0,140	0,049	Beta-mannosidase inhibitor
0,112	0,021	Fatty-acyl-ethyl-ester synthase inhibitor
0,136	0,045	Lanosterol 14 alpha demethylase inhibitor
0,168	0,077	Glyoxylate reductase (NADP+) inhibitor
0,123	0,033	Ketohexokinase inhibitor
0,103	0,013	UGT2B7H substrate
0,103	0,013	UGT2B7Y substrate
0,188	0,099	Retinal dehydrogenase inhibitor
0,100	0,011	Prostaglandin agonist
0,105	0,017	Alpha,alpha-phosphotrehalase inhibitor
0,188	0,100	N-hydroxy-2-acetamidofluorene reductase inhibitor
0,196	0,108	Gluconolactonase inhibitor
0,132	0,044	Ribonuclease inhibitor
0,113	0,025	High-mannose-oligosaccharide beta-1,4-N-acetylglucosaminyltransferase inhibitor
0,139	0,051	UDP-N-acetylglucosamine-dolichyl-phosphate N-acetylglucosaminephosphotransferase inhibitor

0,154	0,067	Cerebroside-sulfatase inhibitor
0,107	0,019	Cushing's syndrome treatment
0,166	0,078	N-methyl-2-oxoglutaramate hydrolase inhibitor
0,131	0,044	Fructose-2,6-bisphosphate 6-phosphatase inhibitor
0,118	0,031	Ribonuclease U2 inhibitor
0,148	0,061	Glucuronolactone reductase inhibitor
0,093	0,007	Actin depolymerization stimulant
0,142	0,055	Prolactin inhibitor
0,113	0,027	Sterol 24-C-methyltransferase inhibitor
0,177	0,091	Tauropine dehydrogenase inhibitor
0,119	0,033	3-Oxosteroid 1-dehydrogenase inhibitor
0,092	0,007	CYP24 inhibitor
0,125	0,039	Polynucleotide adenylyltransferase inhibitor
0,123	0,038	1,5-Anhydro-D-fructose reductase inhibitor
0,120	0,035	Glyceraldehyde-3-phosphate dehydrogenase (NADP+) inhibitor
0,104	0,019	CYP4F12 substrate
0,136	0,051	Fructose-2,6-bisphosphate 2-phosphatase inhibitor
0,104	0,019	Steroid sulfotransferase inhibitor
0,107	0,022	3(or 17)alpha-hydroxysteroid dehydrogenase inhibitor
0,100	0,016	Butyrylcholinesterase inhibitor
0,129	0,044	DNA nucleotidylexotransferase inhibitor
0,112	0,027	Inositol-3-phosphate synthase inhibitor
0,144	0,060	Glutathione S-transferase substrate
0,150	0,066	Cyclamate sulfohydrolase inhibitor
0,159	0,075	IgA-specific metalloendopeptidase inhibitor
0,195	0,111	NADH kinase inhibitor
0,146	0,063	Dolichyl-phosphatase inhibitor
0,209	0,126	Antiparkinsonian, rigidity relieving
0,158	0,075	3'-Nucleotidase inhibitor
0,109	0,027	Long-chain-fatty-acid-CoA ligase inhibitor
0,095	0,012	Hyperparathyroidism treatment
0,162	0,080	Snapalysin inhibitor
0,143	0,061	Acetyl-CoA C-acyltransferase inhibitor
0,095	0,013	Acetylcholine muscarinic agonist
0,229	0,148	CYP1A substrate
0,123	0,041	2-Dehydropantolactone reductase (A-specific) inhibitor
0,278	0,196	Sulfur reductase inhibitor

0,139	0,057	Agmatinase inhibitor
0,132	0,051	NADH dehydrogenase inhibitor
0,098	0,017	Protein 50S ribosomal subunit inhibitor
0,182	0,101	Di-trans,poly-cis-decaprenylcistransferase inhibitor
0,227	0,146	Tyrosine 3 hydroxylase inhibitor
0,096	0,015	ACK1 kinase inhibitor
0,201	0,120	Glutaminy-peptide cyclotransferase inhibitor
0,140	0,061	Protein-S-isoprenylcysteine O-methyltransferase inhibitor
0,155	0,075	Calcium-sensing receptor agonist
0,091	0,011	UGT2B4D substrate
0,091	0,011	UGT2B4E substrate
0,091	0,011	UGT2B19 substrate
0,091	0,011	UGT2B23 substrate
0,091	0,011	UGT2B30 substrate
0,147	0,068	Anesthetic local
0,127	0,048	Heparan-alpha-glucosaminide N-acetyltransferase inhibitor
0,138	0,059	Glycogen (starch) synthase inhibitor
0,130	0,052	Trimethyllysine dioxygenase inhibitor
0,168	0,089	Leucine dehydrogenase inhibitor
0,121	0,043	Aconitate decarboxylase inhibitor
0,168	0,090	Phosphatidylglycerophosphatase inhibitor
0,117	0,039	Bis(5'-adenosyl)-triphosphatase inhibitor
0,145	0,067	Dry eye syndrome treatment
0,127	0,049	Lysozyme inhibitor
0,145	0,068	Trans-1,2-dihydrobenzene-1,2-diol dehydrogenase inhibitor
0,096	0,020	mRNA (guanine-N7-)-methyltransferase inhibitor
0,158	0,081	CYP2B1 substrate
0,113	0,036	Gluconokinase inhibitor
0,219	0,143	Peptidyl-dipeptidase Dcp inhibitor
0,108	0,032	Homoserine O-succinyltransferase inhibitor
0,238	0,162	Antiprotozoal (Trypanosoma)
0,152	0,075	Farnesyltranstransferase inhibitor
0,134	0,058	Deoxyribose-phosphate aldolase inhibitor
0,118	0,042	CMP-N-acetylneuraminate monooxygenase inhibitor
0,169	0,094	Antileukemic
0,117	0,042	GABA transporter 3 inhibitor
0,168	0,093	Antiprotozoal (Plasmodium)

0,165	0,089	Glutamate 5-kinase inhibitor
0,143	0,068	Antibacterial, ophthalmic
0,106	0,031	Xylan 1,4-beta-xylosidase inhibitor
0,115	0,040	Threonine ammonia-lyase inhibitor
0,107	0,032	Beta-N-acetylhexosaminidase inhibitor
0,183	0,108	Nucleoside oxidase (H2O2-forming) inhibitor
0,089	0,015	Glutathione reductase stimulant
0,089	0,015	Glutathione reductase (NADPH) stimulant
0,144	0,070	Phosphoinositide phospholipase C inhibitor
0,113	0,039	Oligo-1,6-glucosidase inhibitor
0,124	0,049	Galactoside 2-alpha-L-fucosyltransferase inhibitor
0,107	0,033	L-fuconate dehydratase inhibitor
0,086	0,012	Corticotropin releasing factor antagonist
0,099	0,026	Opioid mu 2 receptor antagonist
0,198	0,125	Photosensitizer
0,119	0,046	Heat shock protein antagonist
0,129	0,056	NAD+ kinase inhibitor
0,170	0,097	GABA C receptor agonist
0,115	0,042	Acetylcholine agonist
0,134	0,062	Glucosamine-6-phosphate deaminase inhibitor
0,129	0,057	Estrone sulfotransferase inhibitor
0,243	0,170	Hydroxylamine oxidase inhibitor
0,090	0,018	Androgen agonist
0,176	0,104	Carboxypeptidase D inhibitor
0,093	0,021	Steroid DELTA-isomerase inhibitor
0,129	0,058	Poly(ADP-ribose) glycohydrolase inhibitor
0,185	0,114	S-alkylcysteine lyase inhibitor
0,287	0,216	Taurine dehydrogenase inhibitor
0,297	0,226	Heat shock protein 27 antagonist
0,077	0,006	Peptidyl-prolyl cis-trans isomerase inhibitor
0,112	0,041	Cell wall synthesis inhibitor
0,077	0,006	Na+ K+ transporting ATPase inhibitor
0,239	0,168	Mitochondrial processing peptidase inhibitor
0,095	0,025	Dextranucrase inhibitor
0,099	0,029	Alpha,alpha-trehalose-phosphate synthase (UDP-forming) inhibitor
0,130	0,060	Bacterial efflux pump inhibitor
0,110	0,040	Capillary fragility treatment

0,170	0,101	GST P1-1 substrate
0,137	0,068	Saccharolysin inhibitor
0,152	0,083	N6-methyl-lysine oxidase inhibitor
0,142	0,073	Aryl sulfotransferase inhibitor
0,131	0,063	UGT2B1 substrate
0,133	0,064	D-lactate dehydrogenase inhibitor
0,073	0,004	Rotamase (FKBP) inhibitor
0,095	0,027	SULT2A1 substrate
0,133	0,066	Biotin carboxylase inhibitor
0,147	0,080	Penicillopepsin inhibitor
0,074	0,007	Sucrose phosphorylase inhibitor
0,192	0,125	Levansucrase inhibitor
0,154	0,087	Phosphatidate phosphatase inhibitor
0,247	0,180	Cell adhesion molecule inhibitor
0,103	0,037	Galactosylgalactosylglucosylceramidase inhibitor
0,143	0,077	Psychosexual dysfunction treatment
0,110	0,044	Acetylcholine M2 receptor agonist
0,118	0,052	Chondroitin 6-sulfotransferase inhibitor
0,128	0,062	ATP adenylyltransferase inhibitor
0,079	0,013	DNA directed RNA polymerase stimulant
0,122	0,057	(S)-carnitine 3-dehydrogenase inhibitor
0,079	0,014	Sucrose-phosphate phosphatase inhibitor
0,089	0,024	Protein 30S ribosomal subunit inhibitor
0,259	0,194	Mycothiol-S-conjugate amidase inhibitor
0,165	0,100	Crotonoyl-[acyl-carrier-protein] hydratase inhibitor
0,156	0,091	Arylamine N-acetyltransferase inhibitor
0,186	0,121	Hemostatic
0,098	0,034	Phosphorylase kinase inhibitor
0,168	0,104	Fibromyalgia syndrome treatment
0,095	0,031	3-Dehydroquinone dehydratase inhibitor
0,123	0,059	Glycoprotein 3-alpha-L-fucosyltransferase inhibitor
0,143	0,079	Sepsis treatment
0,111	0,048	Phosphofructokinase-1 inhibitor
0,179	0,116	Acyl-CoA oxidase inhibitor
0,221	0,158	CYP1A inhibitor
0,202	0,138	Skeletal muscle relaxant
0,133	0,070	Thiamine-phosphate kinase inhibitor

0,066	0,003	Alpha 1L adrenoreceptor antagonist
0,083	0,020	ATP diphosphatase inhibitor
0,117	0,054	Antispirochetal
0,164	0,101	CTGF expression inhibitor
0,249	0,186	Histamine release inhibitor
0,143	0,081	Shikimate 5-dehydrogenase inhibitor
0,141	0,078	3-Carboxyethylcatechol 2,3-dioxygenase inhibitor
0,205	0,142	Chloride channel blocker
0,204	0,142	Pyruvate decarboxylase inhibitor
0,175	0,113	Peptidyl-dipeptidase B inhibitor
0,112	0,049	Thermomycin inhibitor
0,096	0,034	11-Cis-retinyl-palmitate hydrolase inhibitor
0,077	0,015	Biotin-[methylmalonyl-CoA-carboxytransferase] ligase inhibitor
0,130	0,069	Alcohol dehydrogenase substrate
0,110	0,048	Valine dehydrogenase (NADP+) inhibitor
0,096	0,034	3(or 17)beta-hydroxysteroid dehydrogenase inhibitor
0,191	0,130	L-threonine 3-dehydrogenase inhibitor
0,107	0,046	Leukocyte elastase inhibitor
0,121	0,060	Glucarate dehydratase inhibitor
0,102	0,041	Cellobiose phosphorylase inhibitor
0,125	0,065	Isovaleryl-CoA dehydrogenase inhibitor
0,109	0,048	Tyrosine-protein kinase TYRO 10 inhibitor
0,195	0,135	Arylmalonate decarboxylase inhibitor
0,081	0,021	UGT2B20 substrate
0,088	0,028	Peptidoglycan beta-N-acetylmuramidase inhibitor
0,127	0,068	Cathepsin H inhibitor
0,156	0,096	Dolichol kinase inhibitor
0,145	0,086	Homoserine dehydrogenase inhibitor
0,103	0,043	T cell inhibitor
0,092	0,033	Amylo-alpha-1,6-glucosidase inhibitor
0,098	0,039	CYP26 substrate
0,128	0,069	(S)-2-hydroxy-acid oxidase inhibitor
0,137	0,079	Hepatocyte nuclear factor antagonist
0,137	0,079	Hepatocyte nuclear factor 4 alpha antagonist
0,134	0,075	Alpha-Methylacyl-CoA racemase inhibitor
0,102	0,043	Fructuronate reductase inhibitor
0,102	0,043	Tagaturonate reductase inhibitor

0,233	0,175	Diuretic inhibitor
0,128	0,070	Pancreatic endopeptidase E inhibitor
0,188	0,130	Endopeptidase La inhibitor
0,072	0,014	CYP17 substrate
0,168	0,110	Ornithine cyclodeaminase inhibitor
0,111	0,053	Poly(3-hydroxybutyrate) depolymerase inhibitor
0,150	0,092	Isopenicillin-N synthase inhibitor
0,175	0,118	Cyclohexyl-isocyanide hydratase inhibitor
0,120	0,063	Bronchodilator
0,178	0,121	Protein-synthesizing GTPase inhibitor
0,110	0,055	Sorbose dehydrogenase inhibitor
0,100	0,044	Hair growth stimulant
0,109	0,054	Adenylylsulphatase inhibitor
0,070	0,015	CYP24 substrate
0,206	0,151	Methylumbelliferyl-acetate deacetylase inhibitor
0,073	0,018	Glycine N-choloyltransferase inhibitor
0,194	0,139	Trimethylamine dehydrogenase inhibitor
0,117	0,062	Adenylate cyclase V inhibitor
0,165	0,111	Free radical scavenger
0,206	0,152	N-benzyloxycarbonylglycine hydrolase inhibitor
0,186	0,132	Coccolysin inhibitor
0,101	0,047	UDP-N-acetylglucosamine diphosphorylase inhibitor
0,068	0,014	Microtubule stabilization
0,155	0,101	Tentoxilysin inhibitor
0,148	0,095	3-Hydroxy-4-oxoquinoline 2,4-dioxygenase inhibitor
0,126	0,073	Allantoinase inhibitor
0,185	0,133	Arylesterase inhibitor
0,158	0,106	CYP4A2 substrate
0,124	0,072	Glutamate-1-semialdehyde 2,1-aminomutase inhibitor
0,155	0,103	Procollagen N-endopeptidase inhibitor
0,074	0,021	Glucan 1,4-alpha-glucosidase inhibitor
0,208	0,156	Farnesoid X receptor antagonist
0,076	0,024	D-Serine ammonia-lyase inhibitor
0,090	0,038	Paget's disease treatment
0,071	0,019	Amylosucrase inhibitor
0,138	0,086	Phenylacetate-CoA ligase inhibitor
0,122	0,070	Acyl-lysine deacylase inhibitor

0,137	0,085	Heat shock protein agonist
0,128	0,077	Succinic dehydrogenase inhibitor
0,222	0,171	CYP1A2 substrate
0,205	0,155	DNA-(apurinic or apyrimidinic site) lyase inhibitor
0,130	0,079	Mannan endo-1,6-alpha-mannosidase inhibitor
0,103	0,052	CYP1B1 inhibitor
0,184	0,133	1-Alkylglycerophosphocholine O-acetyltransferase inhibitor
0,202	0,152	NADPH-ferrihemoprotein reductase inhibitor
0,071	0,021	Deoxyadenosine kinase inhibitor
0,108	0,058	Choline dehydrogenase inhibitor
0,100	0,050	Acetylcholine nicotinic antagonist
0,078	0,029	Protein kinase C mu inhibitor
0,201	0,152	ATPase stimulant
0,138	0,089	Trans-pentaprenyltranstransferase inhibitor
0,084	0,035	3-Dehydroquinate synthase inhibitor
0,096	0,048	Heat shock protein 90 antagonist
0,118	0,070	Sulfate adenylyltransferase (ADP) inhibitor
0,060	0,012	Androst-4-ene-3,17-dione monooxygenase inhibitor
0,158	0,110	(S)-3-amino-2-methylpropionate transaminase inhibitor
0,092	0,045	[hydroxymethylglutaryl-CoA reductase (NADPH)] kinase inhibitor
0,159	0,112	Gastritis treatment
0,054	0,006	ATPase (Vacuolar H ⁺) inhibitor
0,094	0,046	2-Methyleneglutarate mutase inhibitor
0,097	0,050	Galactosylceramide sulfotransferase inhibitor
0,144	0,097	Polynucleotide 5'-hydroxy-kinase inhibitor
0,173	0,126	Aspartate-ammonia ligase inhibitor
0,117	0,070	Asparagine-tRNA ligase inhibitor
0,070	0,023	Antibiotic Aminoglycoside-like
0,108	0,060	Omega-amidase inhibitor
0,094	0,047	Arabinose isomerase inhibitor
0,124	0,077	Nitric oxide antagonist
0,090	0,044	Malate dehydrogenase (NADP ⁺) inhibitor
0,196	0,150	Myosin ATPase inhibitor
0,101	0,054	Glutamine-pyruvate transaminase inhibitor
0,092	0,045	Shock treatment
0,111	0,065	Liver cirrhosis treatment
0,207	0,162	Arylsulfate sulfotransferase inhibitor

0,140	0,094	GDP-mannose 6-dehydrogenase inhibitor
0,181	0,135	Dactylisin inhibitor
0,090	0,045	Diacylglycerol O-acyltransferase inhibitor
0,180	0,135	Carbon-monoxide dehydrogenase inhibitor
0,088	0,042	Amino-acid racemase inhibitor
0,098	0,053	Inositol-polyphosphate 5-phosphatase inhibitor
0,089	0,045	2-Methylcitrate synthase inhibitor
0,191	0,146	Anti-Helicobacter pylori
0,071	0,026	Opioid mu 1 receptor antagonist
0,121	0,077	Valine decarboxylase inhibitor
0,115	0,070	Carboxymethylenebutenolidase inhibitor
0,068	0,024	Glucan 1,3-alpha-glucosidase inhibitor
0,084	0,040	Glutaminyl-tRNA synthase (glutamine-hydrolysing) inhibitor
0,101	0,057	Beta amyloid protein antagonist
0,160	0,116	Glycerol 2-dehydrogenase (NADP+) inhibitor
0,094	0,050	3-Deoxy-8-phosphooctulonate synthase inhibitor
0,103	0,059	Malonate-semialdehyde dehydrogenase inhibitor
0,064	0,020	Protein kinase C nu inhibitor
0,113	0,069	Aspartate kinase inhibitor
0,062	0,018	CYP3A11 substrate
0,088	0,045	Deoxycytidine kinase inhibitor
0,076	0,033	[acetyl-CoA carboxylase] kinase inhibitor
0,126	0,083	5 Hydroxytryptamine 2A agonist
0,182	0,139	Leukotriene-B4 20-monooxygenase inhibitor
0,166	0,123	Dimethylmaleate hydratase inhibitor
0,205	0,162	Venom exonuclease inhibitor
0,075	0,032	Malate synthase inhibitor
0,125	0,082	N-acetylneuraminate synthase inhibitor
0,085	0,043	Cyanate hydratase inhibitor
0,053	0,012	CYP4F8 substrate
0,190	0,148	Gamma-glutamyltransferase inhibitor
0,087	0,046	2-Methylcitrate dehydratase inhibitor
0,100	0,060	Creatinase inhibitor
0,117	0,077	O-acetylhomoserine aminocarboxypropyltransferase inhibitor
0,102	0,061	tRNA (cytosine-5-)-methyltransferase inhibitor
0,156	0,117	Endopeptidase inhibitor
0,065	0,026	3'(2'),5'-Bisphosphate nucleotidase inhibitor

0,130	0,091	Glutamin-(asparagin-)ase inhibitor
0,082	0,044	Propanediol dehydratase inhibitor
0,081	0,042	2-Dehydro-3-deoxy-phosphogluconate aldolase inhibitor
0,146	0,108	Hydroxymethylglutaryl-CoA lyase inhibitor
0,175	0,137	Uroporphyrinogen-III synthase inhibitor
0,101	0,063	UDP-glucose 4-epimerase inhibitor
0,068	0,030	1-Alkyl-2-acetylgllycerol O-acyltransferase inhibitor
0,122	0,085	FMN reductase inhibitor
0,092	0,054	UDP-N-acetylglucosamine 2-epimerase inhibitor
0,054	0,017	NADPH oxidoreductase inhibitor
0,053	0,015	Dichloromethane dehalogenase inhibitor
0,068	0,030	NMDA receptor polyamine site agonist
0,070	0,033	Chitin deacetylase inhibitor
0,067	0,030	Lipocortins synthesis agonist
0,107	0,070	Serine 3-dehydrogenase inhibitor
0,095	0,058	Glycerophosphocholine cholinephosphodiesterase inhibitor
0,193	0,156	Monoamine uptake inhibitor
0,051	0,014	Adenylate cyclase I inhibitor
0,097	0,060	Monocarboxylic acid transporter 1 inhibitor
0,097	0,060	Monocarboxylic acid transporter inhibitor
0,083	0,046	Vitamin
0,130	0,093	Adenylate kinase inhibitor
0,118	0,082	Cholinergic
0,102	0,066	CYP1A3 substrate
0,101	0,065	Glycoprotein-fucosylgalactoside alpha-N-acetylgalactosaminyltransferase inhibitor
0,093	0,057	Beta-N-acetylgalactosaminidase inhibitor
0,118	0,082	3-Isopropylmalate dehydratase inhibitor
0,078	0,043	N-acetylglucosaminyldiphosphoundecaprenol N-acetyl-beta-D-mannosaminytransferase inhibitor
0,110	0,075	Mevalonate kinase inhibitor
0,127	0,091	Dihydrouracil dehydrogenase (NAD+) inhibitor
0,068	0,033	Beta galactosidase inhibitor
0,106	0,071	L-galactonolactone oxidase inhibitor
0,064	0,029	CMP-KDO synthase inhibitor
0,119	0,084	Radical formation agonist
0,136	0,101	Guanylate cyclase 1 stimulant
0,110	0,076	Methionine decarboxylase inhibitor
0,078	0,044	(S)-2-Methylmalate dehydratase inhibitor

0,077	0,044	CYP2C2 substrate
0,047	0,013	Cholesterol absorption inhibitor
0,132	0,098	Choline-sulfatase inhibitor
0,050	0,017	Electron transport complex I inhibitor
0,096	0,062	Thiamine-phosphate diphosphorylase inhibitor
0,116	0,083	Nav1.3 sodium channel blocker
0,092	0,059	2-Hydroxy-3-oxopropionate reductase inhibitor
0,121	0,088	Ca ²⁺ /calmodulin-dependent kinase I inhibitor
0,063	0,031	Chalcone isomerase inhibitor
0,082	0,049	S-methyl-5-thioribose kinase inhibitor
0,034	0,002	Actin polymerization inhibitor
0,162	0,130	Gamma-D-Glutamyl-meso-diaminopimelate peptidase inhibitor
0,102	0,070	Site-specific DNA-methyltransferase (adenine-specific) inhibitor
0,077	0,046	4a-Hydroxytetrahydrobiopterin dehydratase inhibitor
0,083	0,052	2-Oxoaldehyde dehydrogenase (NAD ⁺) inhibitor
0,184	0,153	Apoptosis antagonist
0,166	0,135	Opheline kinase inhibitor
0,166	0,135	Taurocyamine kinase inhibitor
0,094	0,063	Alpha,alpha-trehalase inhibitor
0,062	0,031	Biotin-[propionyl-CoA-carboxylase (ATP-hydrolysing)] ligase inhibitor
0,167	0,137	Ferredoxin hydrogenase inhibitor
0,115	0,085	Diisopropyl-fluorophosphatase inhibitor
0,081	0,051	Glycosylceramidase inhibitor
0,051	0,021	Pregnane X receptor antagonist
0,050	0,020	Orotidylate decarboxylase inhibitor
0,103	0,073	Glucose 1-dehydrogenase inhibitor
0,146	0,116	Uterine stimulant
0,095	0,066	Gluconate dehydratase inhibitor
0,177	0,147	Wound healing agent
0,125	0,095	Obsessive-compulsive disorder treatment
0,191	0,162	Pancreatic ribonuclease inhibitor
0,088	0,059	Alcohol oxidase inhibitor
0,055	0,026	HCV NS3/NS4A protease inhibitor
0,182	0,153	ATP phosphoribosyltransferase inhibitor
0,100	0,071	Sarcosine oxidase inhibitor
0,079	0,050	N-acetylglucosamine-6-phosphate deacetylase inhibitor
0,139	0,110	Antimutagenic

0,168	0,139	Antiviral (Hepatitis B)
0,099	0,070	Antifungal enhancer
0,089	0,061	Neuropeptide FF agonist
0,089	0,061	Neuropeptide FF2 agonist
0,136	0,107	Benzoylformate decarboxylase inhibitor
0,170	0,142	Glycine amidinotransferase inhibitor
0,098	0,070	Aerobactin synthase inhibitor
0,110	0,083	Malate-CoA ligase inhibitor
0,067	0,039	Phosphoglucomutase inhibitor
0,090	0,063	2-Aminoethylphosphonate-pyruvate transaminase inhibitor
0,075	0,048	6-Phosphofructo-2-kinase inhibitor
0,078	0,051	Nav1.7 sodium channel blocker
0,169	0,142	Nardilysin inhibitor
0,104	0,077	Phosphonoacetate hydrolase inhibitor
0,037	0,010	GRP78 expression inhibitor
0,064	0,037	Alpha-1,6-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase inhibitor
0,084	0,058	Interleukin 1a antagonist
0,030	0,004	Antiprotozoal activity enhancer
0,096	0,070	Glycine receptor antagonist
0,182	0,156	Methane monooxygenase inhibitor
0,067	0,041	GMP synthase inhibitor
0,034	0,008	CYP27A1 inhibitor
0,103	0,077	Lactaldehyde reductase (NADPH) inhibitor
0,040	0,014	Postcoital contraceptive
0,135	0,110	Lactate 2-monooxygenase inhibitor
0,081	0,055	Neolactotetraosylceramide alpha-2,3-sialyltransferase inhibitor
0,101	0,076	Acetylcholine release stimulant
0,043	0,018	CYP7B substrate
0,043	0,018	CYP7B1 substrate
0,091	0,066	Mannonate dehydratase inhibitor
0,120	0,096	Diphosphomevalonate decarboxylase inhibitor
0,073	0,049	Serine-tRNA ligase inhibitor
0,058	0,034	Prostaglandin-I synthase inhibitor
0,081	0,058	Heat shock protein 70 antagonist
0,160	0,136	Meprin B inhibitor
0,039	0,015	Alpha-1,3-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase inhibitor
0,065	0,041	Thioether S-methyltransferase inhibitor

0,028	0,005	Rotamase (FKBP12) inhibitor
0,132	0,109	Acetate kinase inhibitor
0,104	0,080	2-Aminoadipate transaminase inhibitor
0,191	0,167	Ferredoxin-NAD ⁺ reductase inhibitor
0,191	0,167	Naphthalene 1,2-dioxygenase inhibitor
0,213	0,190	Nicotinate dehydrogenase inhibitor
0,111	0,088	Aryl-alcohol dehydrogenase inhibitor
0,198	0,175	Hypolipemic
0,085	0,062	2-Dehydro-3-deoxy-L-arabinonate dehydratase inhibitor
0,073	0,051	Hydroperoxide dehydratase inhibitor
0,067	0,044	UDP-glucose 6-dehydrogenase inhibitor
0,033	0,011	Cyclomaltodextrin glucanotransferase inhibitor
0,054	0,032	Antifungal (Pneumocystis)
0,080	0,058	Isocitrate lyase inhibitor
0,087	0,066	Contraceptive male
0,027	0,005	Calcineurin inhibitor
0,070	0,048	Estrogen agonist
0,094	0,073	1-Aminocyclopropane-1-carboxylate deaminase inhibitor
0,098	0,077	Sulfotransferase substrate
0,043	0,021	Glycolipid 2-alpha-mannosyltransferase inhibitor
0,111	0,089	3-Oxo adipate enol-lactonase inhibitor
0,086	0,065	Dichloromuconate cycloisomerase inhibitor
0,196	0,174	FMO1 substrate
0,073	0,052	Dihydrolipoamide S-acetyltransferase inhibitor
0,107	0,086	Heat shock protein 70 agonist
0,094	0,073	Cytochrome-c3 hydrogenase inhibitor
0,092	0,071	Homocysteine desulfhydrase inhibitor
0,071	0,050	Sphingosine kinase inhibitor
0,039	0,019	Membrane-oligosaccharide glycerophosphotransferase inhibitor
0,049	0,029	N-acetylglucosaminyldiphosphodolichol N-acetylglucosaminyltransferase inhibitor
0,218	0,198	Endopeptidase So inhibitor
0,081	0,061	CMP-N-acylneuraminate phosphodiesterase inhibitor
0,085	0,066	CTP synthase inhibitor
0,110	0,091	Protein-tyrosine sulfotransferase inhibitor
0,108	0,089	Pyruvate dehydrogenase inhibitor
0,168	0,149	O-aminophenol oxidase inhibitor
0,094	0,076	Adenosylmethionine-8-amino-7-oxononanoate transaminase inhibitor

0,092	0,073	Glycerol-3-phosphate dehydrogenase (NAD+) inhibitor
0,090	0,071	Malate dehydrogenase (oxaloacetate-decarboxylating) inhibitor
0,097	0,078	Malyl-CoA lyase inhibitor
0,098	0,080	NMDA receptor polyamine site antagonist
0,164	0,146	Diuretic
0,063	0,045	Beta-1,4-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase inhibitor
0,082	0,065	Proline dehydrogenase inhibitor
0,050	0,032	UDP-N-acetylglucosamine-lysosomal-enzyme N-acetylglucosaminophosphotransferase inhibitor
0,112	0,094	Acylglycerone-phosphate reductase inhibitor
0,144	0,126	Metalloprotease D inhibitor
0,038	0,020	Cortisol sulfotransferase inhibitor
0,232	0,215	5 Hydroxytryptamine release inhibitor
0,071	0,054	Phosphoribulokinase inhibitor
0,104	0,087	2-Oxoisovalerate dehydrogenase (acylating) inhibitor
0,106	0,089	Excitatory amino acid transporter EAAC1 inhibitor
0,114	0,097	Galactoside O-acetyltransferase inhibitor
0,101	0,085	Iduronate-2-sulfatase inhibitor
0,118	0,102	Glycine receptor agonist
0,117	0,100	Candidapepsin inhibitor
0,088	0,072	D-glutamate oxidase inhibitor
0,175	0,159	Hepatic disorders treatment
0,078	0,062	Homospermidine synthase inhibitor
0,077	0,061	N-acetylneuraminate lyase inhibitor
0,059	0,043	Shaker potassium channel blocker
0,055	0,039	Hydroxylysine kinase inhibitor
0,067	0,052	Antihypermotility
0,057	0,042	Plus-end-directed kinesin ATPase inhibitor
0,157	0,141	Thiol oxidase inhibitor
0,112	0,097	Aldehyde dehydrogenase (NAD+) inhibitor
0,060	0,045	Methylthioadenosine nucleosidase inhibitor
0,091	0,076	Glutamate (mGluR6) antagonist
0,186	0,171	Choline-phosphate cytidyltransferase inhibitor
0,028	0,013	Cholesterol ester transfer protein antagonist
0,076	0,061	[myelin basic protein]-arginine N-methyltransferase inhibitor
0,044	0,029	Thymidine-triphosphatase inhibitor
0,108	0,093	Aminocarboxymuconate-semialdehyde decarboxylase inhibitor
0,050	0,035	Acetylcholine M1 receptor agonist

0,064	0,049	Parathyroid hormone antagonist
0,035	0,021	Methionyl aminopeptidase 2 inhibitor
0,087	0,072	Granulocyte macrophage colony stimulating factor agonist
0,084	0,069	CYP2B4 substrate
0,035	0,021	Protein phosphatase 2A inhibitor
0,025	0,011	Dopamine D2B antagonist
0,037	0,023	Glucose-6-phosphate isomerase inhibitor
0,073	0,059	Polyamine biosynthesis inhibitor
0,038	0,024	Endo-beta-N-acetylglucosaminidase inhibitor
0,142	0,128	Prenyl-diphosphatase inhibitor
0,119	0,106	Granzyme A inhibitor
0,063	0,050	Glycerol kinase inhibitor
0,165	0,152	Hydroxylamine reductase inhibitor
0,125	0,111	MDM2 inhibitor
0,099	0,086	Decylcitrate synthase inhibitor
0,132	0,119	Glutathione reductase inhibitor
0,027	0,013	Antihyperaldosteronism
0,046	0,034	Aromatase inhibitor
0,132	0,119	Antileprosy
0,042	0,029	ADAM10 endopeptidase inhibitor
0,044	0,032	Acetylcholine M4 receptor agonist
0,123	0,110	tRNA nucleotidyltransferase inhibitor
0,063	0,050	CYP2A13 substrate
0,111	0,099	Iron-cytochrome-c reductase inhibitor
0,168	0,155	TRPA1 agonist
0,139	0,127	2,6-Dihydroxypyridine 3-monooxygenase inhibitor
0,119	0,107	Vomilenine glucosyltransferase inhibitor
0,120	0,108	Sphinganine-1-phosphate aldolase inhibitor
0,046	0,034	Dopamine transporter inhibitor
0,116	0,104	HIV-2 reverse transcriptase inhibitor
0,038	0,026	Glucosylceramidase inhibitor
0,066	0,054	Cellulose synthase (UDP-forming) inhibitor
0,025	0,013	CYP27A substrate
0,104	0,093	Nav1.2 sodium channel blocker
0,022	0,011	Ketosteroid monooxygenase inhibitor
0,183	0,172	CYP2C3 substrate
0,038	0,027	Tartrate decarboxylase inhibitor

0,028	0,017	Alpha glucosidase I inhibitor
0,044	0,033	D(-)-tartrate dehydratase inhibitor
0,055	0,045	Urate transporter 1 inhibitor
0,055	0,045	1-Phosphofructokinase inhibitor
0,075	0,064	tRNA (guanine-N2-)-methyltransferase inhibitor
0,024	0,013	Alpha galactosidase inhibitor
0,066	0,055	Lactate-malate transhydrogenase inhibitor
0,136	0,126	Penicillin amidase inhibitor
0,120	0,110	Mitochondrial intermediate peptidase inhibitor
0,070	0,060	Trans-octaprenyltranstransferase inhibitor
0,358	0,348	Gluconate 2-dehydrogenase (acceptor) inhibitor
0,057	0,047	Quinate 5-dehydrogenase inhibitor
0,052	0,043	Protein N-acetylglucosaminyltransferase inhibitor
0,094	0,084	Guanidinodeoxy-scylo-inositol-4-phosphatase inhibitor
0,064	0,055	Aspartate 1-decarboxylase inhibitor
0,021	0,012	CYP17A substrate
0,049	0,039	Tubulin GTPase inhibitor
0,078	0,069	D-malate dehydrogenase (decarboxylating) inhibitor
0,095	0,086	Photinus-luciferin 4-monooxygenase (ATP-hydrolysing) inhibitor
0,016	0,007	Kanamycin kinase inhibitor
0,020	0,012	Antibiotic Macrolide-like
0,220	0,211	CDP-diacylglycerol-serine O-phosphatidyltransferase inhibitor
0,123	0,115	Antidiabetic (type 1)
0,093	0,085	Pyrimidine-deoxynucleoside 2'-dioxygenase inhibitor
0,081	0,073	Astringent
0,052	0,043	Sucrose alpha-glucosidase inhibitor
0,049	0,041	D-lactate-2-sulfatase inhibitor
0,134	0,126	Malate dehydrogenase inhibitor
0,079	0,071	Nucleotide diphosphatase inhibitor
0,083	0,075	Aspartate transaminase inhibitor
0,104	0,096	Thiol S-methyltransferase inhibitor
0,021	0,013	CYP27 substrate
0,106	0,098	Selenocysteine lyase inhibitor
0,047	0,039	AMP nucleosidase inhibitor
0,074	0,066	3-Isopropylmalate dehydrogenase inhibitor
0,022	0,014	NMDA receptor phencyclidine site antagonist
0,029	0,021	Melatonin 2 agonist

0,069	0,061	Aspartate carbamoyltransferase inhibitor
0,074	0,066	Ribulose-bisphosphate carboxylase inhibitor
0,074	0,066	Succinate-hydroxymethylglutarate CoA-transferase inhibitor
0,010	0,002	Antibiotic Tribactam-like
0,020	0,013	Progesterone receptor B1 antagonist
0,032	0,025	Steroid-like
0,056	0,049	Beta-fructofuranosidase inhibitor
0,124	0,117	Alkylglycerone-phosphate synthase inhibitor
0,093	0,086	L-lysine 6-transaminase inhibitor
0,115	0,108	Dolichyl-phosphate beta-D-mannosyltransferase inhibitor
0,067	0,061	Carbamoyl-phosphate synthase (ammonia) inhibitor
0,016	0,009	Antiinflammatory steroid
0,125	0,119	Dependence treatment
0,073	0,066	Cysteine transaminase inhibitor
0,092	0,086	Nav1.1 sodium channel blocker
0,106	0,100	Allophanate hydrolase inhibitor
0,042	0,036	Glucose-1-phosphate adenylyltransferase inhibitor
0,120	0,114	Tetrahydroxynaphthalene reductase inhibitor
0,079	0,073	Hydroxymethylglutaryl-CoA reductase inhibitor
0,054	0,049	Androgen antagonist
0,042	0,037	Arginine-tRNA ligase inhibitor
0,059	0,053	Hot flush treatment
0,039	0,033	Glucose-1-phosphatase inhibitor
0,034	0,028	Ribose-5-phosphate adenylyltransferase inhibitor
0,046	0,040	Nucleoside deoxyribosyltransferase inhibitor
0,017	0,012	CYP11B1 substrate
0,140	0,135	Serine-pyruvate transaminase inhibitor
0,193	0,188	CYP1A2 inhibitor
0,089	0,084	Nicotinic alpha3beta4 receptor agonist
0,071	0,066	Phosphoenolpyruvate carboxykinase (diphosphate) inhibitor
0,055	0,050	Phosphodiesterase IV inhibitor
0,139	0,135	5 Hydroxytryptamine 7 agonist
0,041	0,036	Fructose 5-dehydrogenase (NADP+) inhibitor
0,043	0,038	Polyphosphate kinase inhibitor
0,049	0,045	Uracil phosphoribosyltransferase inhibitor
0,077	0,073	PRL phosphatase inhibitor
0,104	0,100	Beta-alanine-pyruvate transaminase inhibitor

0,104	0,100	Galactose 1-dehydrogenase (NADP+) inhibitor
0,041	0,037	Neuraminidase inhibitor
0,041	0,038	Chorismate mutase inhibitor
0,029	0,025	Transaldolase inhibitor
0,085	0,081	SULT1A1 substrate
0,061	0,057	4-Hydroxy-4-methyl-2-oxoglutarate aldolase inhibitor
0,029	0,026	Homoisocitrate dehydrogenase inhibitor
0,073	0,070	[acyl-carrier-protein] S-malonyltransferase inhibitor
0,073	0,070	L-lysine oxidase inhibitor
0,079	0,075	Lysine decarboxylase inhibitor
0,167	0,164	DNA-3-methyladenine glycosylase I inhibitor
0,062	0,059	Deoxyhypusine synthase inhibitor
0,169	0,167	Cis-1,2-dihydro-1,2-dihydroxynaphthalene dehydrogenase inhibitor
0,196	0,194	FMO3 substrate
0,051	0,048	Acidifying agent gastric
0,087	0,084	Pantothenase inhibitor
0,094	0,091	Dethiobiotin synthase inhibitor
0,061	0,059	Purine biosynthesis inhibitor
0,108	0,106	VEGF expression inhibitor
0,009	0,007	Vanilloid 3 antagonist
0,112	0,110	Peptidylamidoglycolate lyase inhibitor
0,065	0,063	Glycerophosphocholine phosphodiesterase inhibitor
0,102	0,101	Prepilin peptidase inhibitor
0,102	0,101	Haloacetate dehalogenase inhibitor
0,056	0,054	Prokinetic
0,059	0,057	Isocitrate dehydrogenase (NADP+) inhibitor
0,044	0,043	Glutamate uptake inhibitor
0,019	0,019	Cortisone alpha-reductase inhibitor
0,136	0,135	Aldehyde dehydrogenase 2 substrate
0,058	0,058	NMN nucleosidase inhibitor
0,018	0,017	2-Hydroxyacylsphingosine 1-beta-galactosyltransferase inhibitor
0,126	0,126	N-acetyl-gamma-glutamyl-phosphate reductase inhibitor

Table S15. Drug-induced gene expression profiles prediction (DIGEP-Pred). mRNA based, protein based, MCF-7 based, VCaP 6h based, VCaP 24h based, and combination prediction results for complexes 1–5. The name of each gene can be correlated with diseases, side-effects and biological pathways in Comparative Toxicogenomics Database (CTD), Mount Desert Island Biological Laboratory, Salisbury Cove, Maine (<http://ctdbase.org/>).

Complex 1

mRNA based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.623	0.034	<u>TAGLN</u>	0.764	0.025	<u>TNNT1</u>
0.631	0.076	<u>NSF</u>	0.708	0.072	<u>SOLE</u>
0.670	0.118	<u>TMEM194A</u>	0.648	0.034	<u>WIP1</u>
0.602	0.103	<u>TRAF5</u>	0.634	0.036	<u>ASAH1</u>
0.599	0.118	<u>ADORA2B</u>	0.600	0.024	<u>GDPD3</u>
0.599	0.118	<u>CDCA4</u>	0.635	0.065	<u>MT1B</u>
0.599	0.118	<u>CENPJ</u>	0.653	0.088	<u>SFRP1</u>
0.599	0.118	<u>DNAJC9</u>	0.574	0.040	<u>INHBE</u>
0.599	0.118	<u>DONSON</u>	0.610	0.105	<u>CACNG4</u>
0.599	0.118	<u>HAUS8</u>	0.610	0.105	<u>CHRNE</u>
0.599	0.118	<u>MCMBP</u>	0.599	0.118	<u>PFKFB2</u>
0.599	0.118	<u>NUP155</u>	0.599	0.118	<u>SH3BGRL</u>
0.599	0.118	<u>PARP2</u>	0.599	0.118	<u>TRIM13</u>
0.599	0.118	<u>RMI1</u>	0.508	0.028	<u>LSS</u>
0.599	0.118	<u>SCARA3</u>	0.527	0.049	<u>FABP1</u>
0.599	0.118	<u>SLC16A14</u>	0.510	0.033	<u>PHYH</u>
0.599	0.118	<u>SUV39H2</u>	0.523	0.050	<u>FNDCA</u>
0.518	0.075	<u>SRPK2</u>	0.551	0.080	<u>CNTN1</u>
0.592	0.150	<u>TPM1</u>	0.524	0.055	<u>HPN</u>
0.578	0.137	<u>GSS</u>	0.540	0.084	<u>SERPINA3</u>
0.520	0.104	<u>CYP11A1</u>	0.547	0.130	<u>CASP2</u>
0.524	0.168	<u>TMSB15A</u>	0.551	0.141	<u>GAS6</u>
			0.526	0.125	<u>FAM49A</u>
			0.513	0.133	<u>PLXNA2</u>

Protein based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.737	0.075	<u>CHEK1</u>	0.626	0.077	<u>NPPB</u>
0.564	0.124	<u>CAT</u>	0.583	0.104	<u>CD83</u>

MCF7 based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.579	0.065	<u>C3orf52</u>	0.596	0.087	<u>CDKN1B</u>
0.647	0.138	<u>UBE2C</u>	0.589	0.083	<u>ZNF672</u>

0.505	0.095	<u>MRPL34</u>	0.552	0.092	<u>C11orf68</u>
			0.548	0.122	<u>KIAA0232</u>
			0.542	0.116	<u>RANGAP1</u>
			0.536	0.111	<u>STRN</u>
			0.511	0.095	<u>SCAND2P</u>
			0.546	0.143	<u>CLCF1</u>
			0.506	0.113	<u>CSRP2</u>
			0.507	0.142	<u>FOXC1</u>
			0.508	0.154	<u>WISP2</u>
			0.547	0.206	<u>CLDN9</u>
			0.505	0.198	<u>BIN1</u>

VCAP_6h based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.961	0.005	<u>WDR11</u>	0.972	0.004	<u>B4GALT3</u>
0.958	0.005	<u>SLC4A1AP</u>	0.968	0.005	<u>MRPS34</u>
0.940	0.019	<u>MT1F</u>	0.952	0.005	<u>TTC13</u>
0.939	0.018	<u>MT1H</u>	0.952	0.010	<u>SARS2</u>
0.933	0.020	<u>EAPP</u>	0.946	0.007	<u>PMF1</u>
0.888	0.020	<u>SYNE2</u>	0.933	0.008	<u>TUBA4A</u>
0.893	0.026	<u>MT1P2</u>	0.919	0.013	<u>SUGP2</u>
0.826	0.060	<u>MT1X</u>	0.908	0.017	<u>DHPS</u>
0.739	0.068	<u>RAB1F</u>	0.896	0.013	<u>ABCB8</u>
0.716	0.054	<u>EBAG9</u>	0.667	0.092	<u>DCTD</u>
0.678	0.074	<u>MTHFD2</u>	0.607	0.097	<u>DHX32</u>
0.670	0.066	<u>SLC25A44</u>	0.547	0.097	<u>POLE2</u>
0.675	0.079	<u>ZNF221</u>	0.515	0.068	<u>CASC3</u>
0.644	0.086	<u>PEG3</u>	0.528	0.099	<u>RRNAD1</u>
0.630	0.081	<u>ADH5</u>	0.539	0.120	<u>ST6GALNAC4</u>
0.595	0.079	<u>KIAA0485</u>	0.580	0.162	<u>ALG5</u>
0.607	0.112	<u>YWHAZ</u>	0.519	0.114	<u>EHMT2</u>
0.642	0.149	<u>C10ORF68</u>	0.514	0.160	<u>MIF</u>
0.529	0.141	<u>ROBO4</u>	0.527	0.202	<u>KIAA1324</u>
0.539	0.178	<u>CXORF56</u>			
0.531	0.173	<u>CETP</u>			
0.511	0.208	<u>MAGEA11</u>			

VCAP_24h based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.981	0.004	<u>CBX1</u>	0.985	0.005	<u>POU2F1</u>
0.978	0.005	<u>SEC61G</u>	0.984	0.005	<u>ABHD8</u>
0.977	0.005	<u>RNASET2</u>	0.982	0.005	<u>GADD45GIP1</u>
0.977	0.005	<u>TALDO1</u>	0.981	0.005	<u>PLAC1</u>
0.977	0.004	<u>IFIT3</u>	0.981	0.005	<u>AMPD1</u>
0.977	0.004	<u>RGS4</u>	0.981	0.005	<u>SPEF1</u>

0.976	0.004	<u>UBE2E3</u>	0.980	0.005	<u>NUDT18</u>
0.976	0.005	<u>DAP3</u>	0.980	0.005	<u>ODZ3</u>
0.976	0.005	<u>GPBP1L1</u>	0.980	0.005	<u>B3GAT1</u>
0.976	0.005	<u>ATP6V1A</u>	0.980	0.005	<u>WRAP53</u>
0.975	0.004	<u>DMXL2</u>	0.979	0.005	<u>CD27</u>
0.975	0.004	<u>RALGAPB</u>	0.979	0.005	<u>IRGQ</u>
0.975	0.004	<u>C1ORF115</u>	0.979	0.005	<u>CCR9</u>
0.974	0.004	<u>DNAJC13</u>	0.979	0.005	<u>THSD7A</u>
0.972	0.004	<u>EPPK1</u>	0.978	0.005	<u>AK1</u>
0.976	0.008	<u>ZNF24</u>	0.980	0.007	<u>S100G</u>
0.973	0.005	<u>NEK4</u>	0.978	0.005	<u>UCN</u>
0.972	0.004	<u>DCUN1D1</u>	0.979	0.006	<u>GDF9</u>
0.972	0.005	<u>DLG5</u>	0.979	0.006	<u>GNRH2</u>
0.972	0.005	<u>HBS1L</u>	0.976	0.005	<u>COL9A1</u>
0.971	0.005	<u>BCL2L1</u>	0.976	0.004	<u>BCAM</u>
0.971	0.004	<u>DCTN4</u>	0.976	0.005	<u>ACTA1</u>
0.971	0.005	<u>RAB5B</u>	0.977	0.005	<u>WWC3</u>
0.971	0.005	<u>TRAFD1</u>	0.975	0.004	<u>HGSNAT</u>
0.972	0.006	<u>MRPL18</u>	0.976	0.005	<u>ATP5L</u>
0.970	0.004	<u>CLIP1</u>	0.976	0.005	<u>FAM86A</u>
0.971	0.005	<u>CLCN3</u>	0.976	0.005	<u>LDHC</u>
0.970	0.005	<u>TSPYL1</u>	0.979	0.008	<u>KRT85</u>
0.970	0.005	<u>FTO</u>	0.976	0.005	<u>USP19</u>
0.968	0.005	<u>NRBF2</u>	0.975	0.005	<u>PDE8B</u>
0.968	0.005	<u>SERINC1</u>	0.975	0.005	<u>CLTCL1</u>
0.966	0.004	<u>CLMN</u>	0.975	0.004	<u>TNNT1</u>
0.965	0.004	<u>IFT52</u>	0.975	0.005	<u>MYLPF</u>
0.966	0.005	<u>POGZ</u>	0.975	0.005	<u>CSNK1G2</u>
0.966	0.005	<u>ZNF148</u>	0.974	0.005	<u>CHST7</u>
0.965	0.004	<u>NACC2</u>	0.976	0.006	<u>MPZ</u>
0.965	0.005	<u>DBN1</u>	0.975	0.006	<u>ADAMTS12</u>
0.964	0.004	<u>CALML4</u>	0.978	0.008	<u>IFT74</u>
0.963	0.004	<u>RNF11</u>	0.974	0.005	<u>MEGF6</u>
0.962	0.005	<u>PTGES3</u>	0.974	0.004	<u>ITGB1BP3</u>
0.962	0.005	<u>RRAS2</u>	0.974	0.005	<u>PARD6A</u>
0.962	0.005	<u>HMP19</u>	0.974	0.005	<u>ARHGAP22</u>
0.961	0.005	<u>TBL1XR1</u>	0.973	0.005	<u>TMEM186</u>
0.966	0.009	<u>PPP1R12A</u>	0.975	0.007	<u>FAM155A</u>
0.962	0.007	<u>ARPC3</u>	0.974	0.005	<u>PPFIA2</u>
0.960	0.005	<u>TRAPPC10</u>	0.975	0.007	<u>CLDN17</u>
0.957	0.004	<u>EBLN2</u>	0.972	0.004	<u>COPS7B</u>
0.960	0.007	<u>SF3A1</u>	0.972	0.005	<u>GPR35</u>
0.956	0.005	<u>ASAP1</u>	0.972	0.005	<u>HMGB3P1</u>
0.957	0.006	<u>FAM13B</u>	0.976	0.009	<u>CENPO</u>
0.954	0.005	<u>NPTN</u>	0.972	0.005	<u>AURKB</u>
0.954	0.005	<u>COPS7A</u>	0.974	0.007	<u>LECT2</u>
0.953	0.004	<u>CORO1C</u>	0.972	0.005	<u>CTNNBIP1</u>

0.946	0.004	<u>FGF13</u>	0.972	0.005	<u>TTN</u>
0.948	0.007	<u>KCNJ15</u>	0.974	0.007	<u>CAMKMT</u>
0.949	0.010	<u>OGFR</u>	0.972	0.005	<u>PTPRCAP</u>
0.942	0.007	<u>RAF1</u>	0.973	0.007	<u>OR6A2</u>
0.944	0.009	<u>PRPSAP1</u>	0.971	0.005	<u>ZBTB48</u>
0.942	0.008	<u>TRAF4</u>	0.973	0.007	<u>CELA3B</u>
0.945	0.011	<u>NAAA</u>	0.970	0.004	<u>FSTL3</u>
0.949	0.016	<u>RWDD1</u>	0.971	0.005	<u>DEFA6</u>
0.937	0.005	<u>UTP14C</u>	0.970	0.004	<u>PNMT</u>
0.941	0.009	<u>PCNP</u>	0.971	0.005	<u>TFAP4</u>
0.943	0.012	<u>LSM3</u>	0.970	0.005	<u>VWA1</u>
0.941	0.010	<u>NDFIP1</u>	0.974	0.008	<u>C21ORF96</u>
0.939	0.008	<u>CNOT6</u>	0.970	0.005	<u>INSL6</u>
0.947	0.018	<u>CEP170</u>	0.970	0.005	<u>OXCT2</u>
0.950	0.021	<u>SS18L1</u>	0.970	0.005	<u>CPA2</u>
0.935	0.007	<u>WSB2</u>	0.972	0.007	<u>MYH3</u>
0.932	0.005	<u>SAR1B</u>	0.970	0.005	<u>FAM110B</u>
0.930	0.005	<u>FLNA</u>	0.972	0.007	<u>CAPN11</u>
0.932	0.008	<u>STX3</u>	0.970	0.005	<u>KIAA1644</u>
0.927	0.004	<u>AKR1B10</u>	0.972	0.007	<u>CLIP3</u>
0.932	0.010	<u>TMX2</u>	0.969	0.004	<u>CHST10</u>
0.928	0.009	<u>USP15</u>	0.968	0.005	<u>CLDN5</u>
0.930	0.010	<u>RBM23</u>	0.968	0.005	<u>ENDOU</u>
0.924	0.005	<u>HELZ</u>	0.968	0.005	<u>CBR4</u>
0.924	0.005	<u>BMI1</u>	0.968	0.005	<u>FARP2</u>
0.929	0.010	<u>TOM1L1</u>	0.968	0.005	<u>PROC</u>
0.931	0.013	<u>RALBP1</u>	0.968	0.005	<u>GRAP</u>
0.926	0.010	<u>EIF2B1</u>	0.968	0.005	<u>STIM1</u>
0.922	0.008	<u>MTMR4</u>	0.968	0.005	<u>CST5</u>
0.929	0.016	<u>C6ORF62</u>	0.967	0.005	<u>CYP4B1</u>
0.919	0.005	<u>ID2</u>	0.967	0.005	<u>ZSCAN16</u>
0.920	0.012	<u>NIPA2</u>	0.969	0.007	<u>RASL11B</u>
0.913	0.006	<u>FXWD3</u>	0.967	0.005	<u>CD300C</u>
0.921	0.015	<u>CNBP</u>	0.966	0.005	<u>CHRM4</u>
0.910	0.006	<u>SH3BGR13</u>	0.968	0.007	<u>PGAM2</u>
0.916	0.013	<u>SYNE2</u>	0.968	0.007	<u>LOC100506469</u>
0.911	0.017	<u>SEC23IP</u>	0.966	0.005	<u>NKG7</u>
0.908	0.013	<u>RNF187</u>	0.970	0.009	<u>GIF</u>
0.901	0.007	<u>PUM2</u>	0.966	0.006	<u>LSM4</u>
0.896	0.006	<u>SLC35A5</u>	0.969	0.009	<u>UBOX5</u>
0.900	0.010	<u>MDH1</u>	0.964	0.004	<u>CACNA2D2</u>
0.908	0.022	<u>HSP90B1</u>	0.964	0.005	<u>PMCHL1</u>
0.897	0.011	<u>ELOVL2</u>	0.964	0.005	<u>KLHL25</u>
0.894	0.014	<u>CSNK1A1</u>	0.964	0.005	<u>MUC2</u>
0.895	0.016	<u>ZYX</u>	0.966	0.007	<u>CCL5</u>
0.897	0.019	<u>RNF114</u>	0.966	0.007	<u>ARHGEF16</u>
0.892	0.016	<u>HDGF</u>	0.966	0.007	<u>CDH19</u>

0.889	0.013	<u>MLH1</u>	0.962	0.003	<u>XAB2</u>
0.891	0.018	<u>TRAK1</u>	0.963	0.005	<u>ZBED5</u>
0.891	0.024	<u>PTPLB</u>	0.965	0.007	<u>RNF32</u>
0.873	0.006	<u>NUP43</u>	0.963	0.005	<u>ERCC2</u>
0.882	0.020	<u>DDX1</u>	0.963	0.005	<u>LRMP</u>
0.885	0.023	<u>COX6A1</u>	0.962	0.005	<u>RANBP17</u>
0.886	0.025	<u>MSL1</u>	0.962	0.005	<u>NACAD</u>
0.877	0.018	<u>IRS2</u>	0.964	0.006	<u>ALPP</u>
0.883	0.029	<u>UGCG</u>	0.967	0.009	<u>TUBAL3</u>
0.858	0.005	<u>KIAA0664L3</u>	0.962	0.005	<u>ETHE1</u>
0.888	0.035	<u>CTTN</u>	0.964	0.007	<u>PSORS1C2</u>
0.877	0.025	<u>PNPO</u>	0.962	0.005	<u>NRSN2</u>
0.853	0.008	<u>SNUPN</u>	0.966	0.009	<u>IFT140</u>
0.863	0.026	<u>PGS1</u>	0.968	0.011	<u>HSD3B2</u>
0.873	0.037	<u>PSMG2</u>	0.967	0.010	<u>NGB</u>
0.863	0.031	<u>SNX11</u>	0.961	0.004	<u>CHAC1</u>
0.833	0.006	<u>TOMM22</u>	0.965	0.009	<u>AKAP5</u>
0.856	0.030	<u>FXR1</u>	0.970	0.014	<u>GABRB1</u>
0.854	0.029	<u>TFG</u>	0.961	0.005	<u>RCC1</u>
0.857	0.033	<u>EIF3I</u>	0.966	0.010	<u>ZNF816</u>
0.864	0.040	<u>SLC39A6</u>	0.969	0.013	<u>LOC80054</u>
0.864	0.041	<u>TOMM20</u>	0.962	0.006	<u>ADCY8</u>
0.841	0.023	<u>MED24</u>	0.960	0.005	<u>ZNF629</u>
0.849	0.032	<u>UFD1L</u>	0.960	0.005	<u>STAP1</u>
0.846	0.029	<u>KATNB1</u>	0.960	0.005	<u>LOC100507424</u>
0.828	0.026	<u>IFNGR1</u>	0.960	0.005	<u>AHDC1</u>
0.826	0.028	<u>C1ORF216</u>	0.959	0.004	<u>SLC37A1</u>
0.824	0.029	<u>RPL36A</u>	0.966	0.012	<u>ALDH1B1</u>
0.839	0.044	<u>C14ORF109</u>	0.963	0.010	<u>GPR153</u>
0.831	0.037	<u>AASDHPPT</u>	0.959	0.005	<u>ARHGEF7</u>
0.838	0.045	<u>MICALL1</u>	0.959	0.005	<u>EDN1</u>
0.823	0.031	<u>EVL</u>	0.964	0.010	<u>CPS1-IT1</u>
0.820	0.029	<u>ABHD10</u>	0.958	0.005	<u>SLC9A3R2</u>
0.824	0.033	<u>ABHD2</u>	0.961	0.008	<u>ASAP3</u>
0.821	0.033	<u>RPLP1</u>	0.958	0.005	<u>SLC26A6</u>
0.825	0.037	<u>SORBS3</u>	0.957	0.005	<u>TPSB2</u>
0.824	0.041	<u>RNF220</u>	0.957	0.005	<u>SRRM1</u>
0.807	0.025	<u>C20ORF4</u>	0.962	0.010	<u>STOML1</u>
0.817	0.036	<u>ZFAND6</u>	0.960	0.008	<u>RGS9</u>
0.811	0.030	<u>ZNF32</u>	0.959	0.007	<u>KDM4D</u>
0.836	0.056	<u>C8ORF33</u>	0.960	0.008	<u>BIN1</u>
0.805	0.032	<u>RHOT1</u>	0.955	0.003	<u>PLEKHJ1</u>
0.799	0.032	<u>FTL</u>	0.957	0.005	<u>EBI3</u>
0.794	0.028	<u>HDAC3</u>	0.956	0.005	<u>DHRS1</u>
0.815	0.053	<u>SPCS1</u>	0.955	0.004	<u>TRAPPC2L</u>
0.790	0.031	<u>LTBR</u>	0.960	0.009	<u>PZP</u>
0.797	0.039	<u>PTS</u>	0.959	0.009	<u>CDH11</u>

0.799	0.043	<u>PSMA2</u>	0.954	0.005	<u>ANKRD49</u>
0.800	0.047	<u>ZNF500</u>	0.957	0.008	<u>DLK1</u>
0.793	0.041	<u>ATP5B</u>	0.962	0.012	<u>ODZ4</u>
0.779	0.036	<u>IARS</u>	0.956	0.006	<u>EPN3</u>
0.774	0.040	<u>UBR7</u>	0.958	0.009	<u>MYOM1</u>
0.766	0.034	<u>POMGNT1</u>	0.958	0.009	<u>DEFA5</u>
0.773	0.041	<u>RPL23A</u>	0.958	0.010	<u>FABP2</u>
0.765	0.038	<u>RPL19</u>	0.952	0.004	<u>ZNF606</u>
0.764	0.037	<u>RTF1</u>	0.954	0.006	<u>CCNJL</u>
0.771	0.046	<u>ARL6IP4</u>	0.958	0.010	<u>FBXL2</u>
0.775	0.053	<u>WIPF2</u>	0.953	0.004	<u>TAF15</u>
0.768	0.048	<u>NAPA</u>	0.957	0.008	<u>TNMD</u>
0.742	0.028	<u>POLD2</u>	0.961	0.012	<u>LCK</u>
0.759	0.052	<u>KDM2A</u>	0.954	0.007	<u>MATN4</u>
0.744	0.040	<u>VBP1</u>	0.952	0.005	<u>SMPDL3B</u>
0.756	0.055	<u>HRAS</u>	0.955	0.009	<u>ZNF93</u>
0.737	0.046	<u>PEX11A</u>	0.951	0.005	<u>CLPS</u>
0.742	0.051	<u>UBA2</u>	0.958	0.012	<u>RAG1</u>
0.745	0.054	<u>ARL1</u>	0.954	0.009	<u>FLJ11710</u>
0.743	0.056	<u>VEZF1</u>	0.956	0.010	<u>NPFFR1</u>
0.738	0.054	<u>RPS4X</u>	0.951	0.005	<u>HIST1H3F</u>
0.717	0.054	<u>SPAST</u>	0.950	0.005	<u>C22ORF29</u>
0.714	0.054	<u>SEH1L</u>	0.950	0.005	<u>SLC5A1</u>
0.719	0.069	<u>DAG1</u>	0.954	0.010	<u>CASQ2</u>
0.723	0.078	<u>TM2D3</u>	0.949	0.005	<u>ZBTB22</u>
0.705	0.070	<u>C19ORF42</u>	0.955	0.011	<u>PDHA2</u>
0.695	0.067	<u>DNAJC8</u>	0.958	0.014	<u>KIR3DL1</u>
0.689	0.066	<u>GOSR1</u>	0.949	0.005	<u>KIAA0182</u>
0.694	0.079	<u>ANAPC5</u>	0.950	0.007	<u>PDE6B</u>
0.702	0.101	<u>HSPH1</u>	0.949	0.006	<u>HGFAC</u>
0.666	0.068	<u>UBE2S</u>	0.957	0.014	<u>DPPA4</u>
0.660	0.063	<u>CASC3</u>	0.953	0.010	<u>GPR98</u>
0.667	0.078	<u>RPLP0</u>	0.950	0.007	<u>HIST1H1B</u>
0.652	0.065	<u>PSMD3</u>	0.950	0.007	<u>RHBDL1</u>
0.641	0.056	<u>LRRC59</u>	0.948	0.005	<u>HIST1H2AI</u>
0.644	0.075	<u>B3GNT1</u>	0.951	0.009	<u>MYL1</u>
0.625	0.061	<u>UBE2K</u>	0.947	0.005	<u>SCD5</u>
0.661	0.098	<u>C20ORF24</u>	0.947	0.006	<u>TNNC1</u>
0.654	0.092	<u>HNRNPA1</u>	0.946	0.005	<u>ZNF667</u>
0.633	0.072	<u>COPB2</u>	0.947	0.006	<u>SRD5A3</u>
0.629	0.070	<u>C12ORF52</u>	0.960	0.020	<u>OR1F1</u>
0.650	0.093	<u>PHB</u>	0.945	0.005	<u>CPA1</u>
0.633	0.077	<u>PHGDH</u>	0.950	0.009	<u>MEFV</u>
0.630	0.079	<u>WDR61</u>	0.946	0.006	<u>TCF21</u>
0.627	0.091	<u>EPRS</u>	0.947	0.007	<u>MYBPH</u>
0.578	0.056	<u>RHOA</u>	0.950	0.010	<u>LZTR1</u>
0.627	0.120	<u>STAU1</u>	0.953	0.013	<u>CD207</u>

0.611	0.105	<u>PGRMC1</u>	0.946	0.007	<u>L1TD1</u>
0.610	0.104	<u>CAPNS1</u>	0.948	0.009	<u>LY6G6C</u>
0.598	0.098	<u>RPS10</u>	0.943	0.005	<u>CRLF1</u>
0.601	0.101	<u>KIAA0100</u>	0.945	0.007	<u>PRLH</u>
0.605	0.107	<u>RPS2</u>	0.945	0.007	<u>S100A6</u>
0.564	0.071	<u>PXN</u>	0.948	0.010	<u>INS</u>
0.568	0.081	<u>SMARCD2</u>	0.942	0.005	<u>MPDZ</u>
0.614	0.128	<u>PSMA7</u>	0.955	0.018	<u>NLRP1</u>
0.590	0.106	<u>TMEM97</u>	0.958	0.020	<u>FBXO40</u>
0.556	0.090	<u>TSPAN3</u>	0.945	0.007	<u>TEKT2</u>
0.530	0.064	<u>TP53</u>	0.949	0.012	<u>MGC3771</u>
0.577	0.113	<u>TMEM93</u>	0.942	0.005	<u>IL37</u>
0.575	0.114	<u>OXA1L</u>	0.946	0.009	<u>NUP54</u>
0.562	0.101	<u>H2BFS</u>	0.950	0.013	<u>ALLC</u>
0.583	0.125	<u>LUC7L3</u>	0.948	0.012	<u>PSKH1</u>
0.537	0.081	<u>POP4</u>	0.945	0.009	<u>TRAF2</u>
0.569	0.122	<u>RPL13A</u>	0.955	0.020	<u>SFRP5</u>
0.579	0.141	<u>SET</u>	0.943	0.007	<u>C20ORF103</u>
0.552	0.114	<u>NFKBIA</u>	0.940	0.005	<u>AP4M1</u>
0.520	0.087	<u>FOXO3</u>	0.947	0.012	<u>ZNF167</u>
0.557	0.127	<u>CSK</u>	0.943	0.008	<u>WRN</u>
0.558	0.129	<u>TMEM147</u>	0.939	0.005	<u>HIST1H2AM</u>
0.545	0.121	<u>RGS2</u>	0.942	0.008	<u>MPV17</u>
0.557	0.142	<u>NFE2L1</u>	0.946	0.012	<u>DSC1</u>
0.541	0.134	<u>CLSTN1</u>	0.945	0.011	<u>PRKCG</u>
0.558	0.160	<u>N4BP2L2</u>	0.947	0.014	<u>ARSF</u>
0.540	0.148	<u>CCT6A</u>	0.939	0.005	<u>APOF</u>
0.535	0.147	<u>STK25</u>	0.943	0.009	<u>MAN2A1</u>
0.529	0.144	<u>ZNF146</u>	0.945	0.011	<u>GABRA4</u>
0.510	0.126	<u>COL9A3</u>	0.947	0.014	<u>ZNF197</u>
			0.943	0.010	<u>CLDN15</u>
			0.945	0.013	<u>HAPLN1</u>
			0.946	0.015	<u>BAIAP2L2</u>
			0.941	0.010	<u>HIST1H2AE</u>
			0.945	0.014	<u>SRGAP2</u>
			0.939	0.008	<u>SOX3</u>
			0.935	0.005	<u>CRYBA2</u>
			0.941	0.010	<u>SGSM3</u>
			0.939	0.008	<u>HOXA7</u>
			0.935	0.005	<u>HIGD1B</u>
			0.942	0.012	<u>TIMM44</u>
			0.941	0.011	<u>NCDN</u>
			0.935	0.005	<u>NAT6</u>
			0.945	0.015	<u>GDF2</u>
			0.947	0.017	<u>CIDEA</u>
			0.948	0.018	<u>SEMA6B</u>
			0.947	0.018	<u>TCL1B</u>

	0.943	0.014	<u>REG1B</u>
	0.943	0.014	<u>ADAM11</u>
	0.940	0.011	<u>ZNF362</u>
	0.943	0.014	<u>ADA</u>
	0.935	0.006	<u>NGLY1</u>
	0.933	0.005	<u>PLEKHA8P1</u>
	0.937	0.009	<u>PDCD1LG2</u>
	0.942	0.014	<u>TNF</u>
	0.939	0.011	<u>OR3A3</u>
	0.935	0.007	<u>CELA2A</u>
	0.943	0.015	<u>LOC202181</u>
	0.932	0.005	<u>GMFG</u>
	0.932	0.005	<u>EPHA4</u>
	0.931	0.005	<u>RNF115</u>
	0.939	0.013	<u>CHODL</u>
	0.940	0.014	<u>KIR3DS1</u>
	0.937	0.010	<u>CD93</u>
	0.941	0.014	<u>GNG4</u>
	0.935	0.009	<u>GNA11</u>
	0.940	0.014	<u>KIR2DS3</u>
	0.935	0.009	<u>FZD10</u>
	0.946	0.020	<u>NRIP2</u>
	0.950	0.025	<u>STAB2</u>
	0.929	0.005	<u>RAMP2</u>
	0.929	0.004	<u>GNA12</u>
	0.945	0.021	<u>RENBP</u>
	0.949	0.025	<u>IL36RN</u>
	0.931	0.008	<u>IGF1R</u>
	0.931	0.009	<u>PAEP</u>
	0.934	0.012	<u>GPD1</u>
	0.930	0.008	<u>HIST1H4E</u>
	0.935	0.013	<u>RORC</u>
	0.942	0.020	<u>SAFB2</u>
	0.931	0.009	<u>GCG</u>
	0.932	0.010	<u>APEX2</u>
	0.930	0.008	<u>GPR19</u>
	0.933	0.011	<u>TASP1</u>
	0.926	0.005	<u>AICDA</u>
	0.927	0.006	<u>ACE</u>
	0.936	0.015	<u>GPR1</u>
	0.935	0.014	<u>OTC</u>
	0.926	0.006	<u>MMRN2</u>
	0.929	0.008	<u>MAP4K2</u>
	0.934	0.015	<u>MEP1A</u>
	0.930	0.011	<u>ANKRD36</u>
	0.937	0.018	<u>HIST1H3J</u>
	0.931	0.012	<u>PROX1</u>

	0.934	0.015	<u>HIST1H1D</u>
	0.932	0.014	<u>BMP5</u>
	0.926	0.008	<u>KCNE1L</u>
	0.937	0.019	<u>FSCN3</u>
	0.926	0.008	<u>SLMO1</u>
	0.924	0.007	<u>PLA2G10</u>
	0.931	0.014	C11ORF63
	0.922	0.005	<u>GGTLC1</u>
	0.930	0.014	C9ORF7
	0.924	0.008	ZNF643
	0.926	0.009	ZNF324
	0.930	0.014	<u>PKP2</u>
	0.923	0.007	<u>GMEB1</u>
	0.926	0.010	MYBPC2
	0.945	0.029	<u>ARHGDIG</u>
	0.935	0.021	C22ORF26
	0.920	0.005	<u>RPL13P5</u>
	0.922	0.008	<u>FBXL8</u>
	0.936	0.022	<u>PRL</u>
	0.927	0.013	<u>GP9</u>
	0.928	0.015	<u>RAB11B</u>
	0.923	0.010	<u>USP32</u>
	0.926	0.014	<u>PPY</u>
	0.928	0.016	<u>ADAMTS13</u>
	0.920	0.007	<u>CLEC11A</u>
	0.932	0.019	<u>INSRR</u>
	0.921	0.009	<u>MPO</u>
	0.923	0.012	<u>RXRG</u>
	0.932	0.021	<u>MYL2</u>
	0.922	0.011	<u>SAA3P</u>
	0.919	0.008	<u>LGI1</u>
	0.917	0.006	<u>GDF3</u>
	0.934	0.024	ZNF8
	0.917	0.008	JMJD7
	0.927	0.020	<u>RNF186</u>
	0.928	0.020	<u>KLRG1</u>
	0.917	0.009	<u>SLC9A2</u>
	0.915	0.008	<u>G6PC</u>
	0.917	0.010	<u>SLC10A2</u>
	0.925	0.018	FRMPD1
	0.916	0.009	<u>MMP28</u>
	0.921	0.014	<u>BTC</u>
	0.921	0.015	<u>HEG1</u>
	0.922	0.016	CXORF27
	0.914	0.009	<u>PPP2R5E</u>
	0.914	0.009	<u>SCARF1</u>
	0.918	0.013	<u>TMPRSS6</u>

	0.916	0.011	<u>ASTE1</u>
	0.924	0.020	<u>IL1A</u>
	0.929	0.025	<u>C6ORF15</u>
	0.917	0.013	<u>MORN1</u>
	0.917	0.015	<u>ALOX5AP</u>
	0.918	0.015	<u>LRAT</u>
	0.915	0.013	<u>RALA</u>
	0.914	0.012	<u>ZNF177</u>
	0.906	0.005	<u>HIST1H4C</u>
	0.919	0.018	<u>SCN1A</u>
	0.921	0.019	<u>UBR4</u>
	0.916	0.014	<u>VPS33A</u>
	0.922	0.021	<u>ESRRA</u>
	0.920	0.019	<u>C19ORF73</u>
	0.920	0.019	<u>TAS2R9</u>
	0.907	0.007	<u>XPO4</u>
	0.909	0.009	<u>ARPP21</u>
	0.913	0.014	<u>CACNA1S</u>
	0.917	0.019	<u>RERGL</u>
	0.913	0.014	<u>SH3TC2</u>
	0.915	0.016	<u>TMEM30B</u>
	0.915	0.017	<u>SLC35E2</u>
	0.903	0.005	<u>HIST1H3G</u>
	0.919	0.021	<u>CEBPE</u>
	0.915	0.017	<u>CD3G</u>
	0.916	0.019	<u>RPS3A</u>
	0.909	0.012	<u>MCPH1</u>
	0.908	0.011	<u>GDNF</u>
	0.907	0.010	<u>LRRK1</u>
	0.917	0.020	<u>PTPN7</u>
	0.913	0.016	<u>CASZ1</u>
	0.918	0.022	<u>ZFR2</u>
	0.913	0.017	<u>CYP2A13</u>
	0.903	0.007	<u>CNPPD1</u>
	0.910	0.015	<u>CAPN9</u>
	0.914	0.018	<u>KIR2DL4</u>
	0.905	0.009	<u>USP11</u>
	0.908	0.013	<u>MAGIX</u>
	0.910	0.015	<u>TRIM48</u>
	0.920	0.025	<u>OR2F1</u>
	0.915	0.020	<u>KIAA1310</u>
	0.911	0.017	<u>UBTD1</u>
	0.910	0.016	<u>GNL3LP1</u>
	0.915	0.021	<u>CNNM1</u>
	0.924	0.030	<u>NDUFB7</u>
	0.909	0.016	<u>GSTCD</u>
	0.898	0.005	<u>CCNT1</u>

	0.914	0.021	<u>TNN</u>
	0.905	0.013	<u>CDK20</u>
	0.913	0.021	<u>MYH2</u>
	0.910	0.018	<u>GPR21</u>
	0.907	0.015	<u>CPNE7</u>
	0.908	0.016	<u>DMRT1</u>
	0.904	0.013	<u>C1ORF114</u>
	0.904	0.013	<u>ZNF141</u>
	0.905	0.014	<u>TBX21</u>
	0.899	0.008	<u>KCNK2</u>
	0.914	0.024	<u>ACCN1</u>
	0.911	0.021	<u>UNC5C</u>
	0.901	0.012	<u>FCF1</u>
	0.906	0.016	<u>MRPL41</u>
	0.902	0.013	<u>CFHR5</u>
	0.909	0.019	<u>FLNC</u>
	0.908	0.019	<u>BEGAIN</u>
	0.905	0.017	<u>MPZL2</u>
	0.916	0.027	<u>FGF20</u>
	0.912	0.024	<u>TMEM59L</u>
	0.906	0.019	<u>ANKRD1</u>
	0.899	0.012	<u>COLEC11</u>
	0.909	0.023	<u>RGS3</u>
	0.895	0.009	<u>KLK14</u>
	0.910	0.024	<u>CACNB4</u>
	0.899	0.014	<u>KLRC3</u>
	0.910	0.025	<u>MZB1</u>
	0.902	0.017	<u>ACADS</u>
	0.900	0.016	<u>LIN7A</u>
	0.909	0.026	<u>KIR2DS2</u>
	0.902	0.019	<u>HOXB1</u>
	0.904	0.021	<u>ABP1</u>
	0.914	0.031	<u>PTPRB</u>
	0.905	0.023	<u>SSTR5</u>
	0.900	0.018	<u>CELA3A</u>
	0.917	0.035	<u>AQP7</u>
	0.898	0.016	<u>NCKAP1</u>
	0.898	0.016	<u>SLC17A2</u>
	0.908	0.027	<u>SLCO3A1</u>
	0.913	0.031	<u>PLA2G5</u>
	0.906	0.025	<u>OR2S2</u>
	0.905	0.024	<u>DNAJC4</u>
	0.898	0.017	<u>B3GALT2</u>
	0.905	0.025	<u>CCDC64</u>
	0.899	0.020	<u>BACH2</u>
	0.906	0.027	<u>ANGPTL4</u>
	0.886	0.007	<u>SFT2D2</u>

	0.894	0.016	KRT3
	0.902	0.024	<u>KLHL4</u>
	0.897	0.019	<u>RPL3L</u>
	0.894	0.016	<u>CRYBB3</u>
	0.896	0.018	<u>TM4SF5</u>
	0.900	0.023	<u>TXNRD3</u>
	0.895	0.018	<u>PTGER1</u>
	0.899	0.023	<u>NPPB</u>
	0.896	0.021	LOC400084
	0.888	0.013	<u>EBLN2</u>
	0.896	0.021	<u>INSR</u>
	0.893	0.019	<u>IVD</u>
	0.897	0.024	<u>HIST1H2BB</u>
	0.895	0.023	<u>FLT4</u>
	0.894	0.021	<u>COL18A1</u>
	0.890	0.018	<u>FKBP6</u>
	0.887	0.015	<u>DDX43</u>
	0.887	0.015	<u>MRPL20</u>
	0.897	0.025	<u>RAPGEF5</u>
	0.899	0.028	<u>INHBC</u>
	0.903	0.032	C1ORF38
	0.890	0.019	<u>LRRN3</u>
	0.881	0.011	<u>VIP</u>
	0.883	0.013	<u>RGP1</u>
	0.895	0.026	<u>HTR1F</u>
	0.909	0.039	LOC100288594
	0.898	0.029	<u>GPR182</u>
	0.892	0.023	GALNT8
	0.898	0.030	<u>SIX3</u>
	0.898	0.029	<u>ECE2</u>
	0.881	0.012	ZNF124
	0.894	0.026	ASMTL-AS1
	0.884	0.016	<u>OVGP1</u>
	0.892	0.025	<u>MSTN</u>
	0.893	0.026	<u>SYNGR4</u>
	0.897	0.030	<u>TP73-AS1</u>
	0.892	0.025	<u>OXT</u>
	0.890	0.024	<u>FKSG2</u>
	0.895	0.029	FGF14
	0.891	0.026	ITFG2
	0.886	0.020	<u>SLC12A6</u>
	0.889	0.024	<u>USP27X</u>
	0.902	0.037	<u>RAB3D</u>
	0.889	0.024	<u>RFPL3-AS1</u>
	0.898	0.033	<u>KIR3DL3</u>
	0.895	0.030	<u>PYGM</u>
	0.885	0.022	<u>FAM164C</u>

	0.871	0.007	<u>CDHR1</u>
	0.881	0.018	<u>ARHGEF10L</u>
	0.871	0.008	<u>OFD1</u>
	0.880	0.017	<u>FAM174B</u>
	0.887	0.024	HCG26
	0.878	0.015	<u>DFFA</u>
	0.888	0.026	TRPV5
	0.888	0.026	<u>TRIM14</u>
	0.878	0.015	<u>FZD5</u>
	0.879	0.017	C4ORF43
	0.885	0.023	<u>CWH43</u>
	0.886	0.025	<u>RPAIN</u>
	0.879	0.018	<u>SEMG2</u>
	0.877	0.016	<u>CFB</u>
	0.893	0.032	<u>BRD7P3</u>
	0.881	0.020	<u>MMP15</u>
	0.889	0.029	CRX
	0.893	0.034	<u>KIAA1024</u>
	0.888	0.028	<u>HIST1H4A</u>
	0.874	0.014	<u>FKBP10</u>
	0.884	0.024	C19ORF26
	0.881	0.021	C8ORF51
	0.887	0.028	<u>HIST1H2AK</u>
	0.885	0.025	<u>NR5A1</u>
	0.891	0.032	<u>ESRRB</u>
	0.874	0.016	<u>NARS</u>
	0.886	0.028	<u>KCNJ1</u>
	0.897	0.039	<u>RHOBTB2</u>
	0.879	0.021	LOC729799
	0.875	0.017	<u>SGCG</u>
	0.864	0.006	<u>KIF18A</u>
	0.870	0.012	<u>PSD3</u>
	0.882	0.025	<u>MYH1</u>
	0.891	0.034	<u>PRTN3</u>
	0.882	0.024	<u>UHRF1BP1L</u>
	0.882	0.025	<u>BAIAP3</u>
	0.874	0.018	<u>TBC1D8</u>
	0.870	0.014	<u>HIST1H3C</u>
	0.883	0.027	<u>SLC18A1</u>
	0.874	0.018	KIAA1614
	0.883	0.027	<u>SP2</u>
	0.880	0.025	<u>TRPM8</u>
	0.874	0.019	<u>RETN</u>
	0.884	0.030	FAM189A1
	0.876	0.022	<u>CD7</u>
	0.878	0.025	<u>ATP4A</u>
	0.877	0.024	<u>ATP2A3</u>

	0.880	0.027	<u>NUBP1</u>
	0.885	0.032	<u>CUL2</u>
	0.887	0.034	<u>RHBG</u>
	0.880	0.028	<u>SLC13A4</u>
	0.879	0.028	<u>GFRA4</u>
	0.876	0.024	<u>GATA1</u>
	0.876	0.024	<u>KERA</u>
	0.878	0.026	<u>HOXA4</u>
	0.884	0.033	<u>SNRNP70</u>
	0.881	0.029	<u>JPH2</u>
	0.873	0.022	<u>RUNDC2C</u>
	0.875	0.025	<u>LY6G5C</u>
	0.876	0.026	<u>L1CAM</u>
	0.875	0.025	<u>SULF1</u>
	0.870	0.020	<u>DLGAP4</u>
	0.870	0.020	<u>CD79A</u>
	0.872	0.022	<u>KRAS</u>
	0.874	0.025	<u>TNFRSF10C</u>
	0.874	0.025	<u>OR5I1</u>
	0.877	0.028	<u>CACNA1H</u>
	0.872	0.023	<u>WFDC1</u>
	0.872	0.024	<u>FLJ22184</u>
	0.861	0.012	<u>SMC5</u>
	0.883	0.035	<u>SCAI</u>
	0.874	0.027	<u>DPP4</u>
	0.874	0.026	<u>CHRNA2</u>
	0.870	0.023	<u>SYNM</u>
	0.880	0.033	<u>GALK1</u>
	0.874	0.027	<u>TPSAB1</u>
	0.865	0.018	<u>PTCD1</u>
	0.871	0.025	<u>TSPAN9</u>
	0.875	0.029	<u>SPCS3</u>
	0.865	0.019	<u>WSCD1</u>
	0.874	0.028	<u>RBP3</u>
	0.861	0.014	<u>WNT7A</u>
	0.882	0.036	<u>LHX3</u>
	0.869	0.023	<u>NTRK1</u>
	0.880	0.034	<u>PKP1</u>
	0.877	0.031	<u>PCDHA9</u>
	0.873	0.028	<u>DOK3</u>
	0.873	0.027	<u>P2RY6</u>
	0.869	0.024	<u>SCN10A</u>
	0.868	0.023	<u>MFAP3</u>
	0.870	0.026	<u>WDR25</u>
	0.867	0.023	<u>CORO1A</u>
	0.871	0.027	<u>TPM3</u>
	0.880	0.037	<u>KCNMB2</u>

	0.860	0.017	<u>VAX2</u>
	0.868	0.026	<u>DBF4B</u>
	0.875	0.033	MMP20
	0.871	0.029	<u>RAP1A</u>
	0.866	0.024	CNTD2
	0.870	0.029	<u>HIST1H2AB</u>
	0.867	0.027	<u>C9ORF156</u>
	0.869	0.029	<u>CNGA1</u>
	0.861	0.021	<u>NEUROD1</u>
	0.870	0.030	AKAP4
	0.864	0.024	C2ORF67
	0.879	0.039	<u>SNHG3</u>
	0.863	0.023	<u>GRIK3</u>
	0.863	0.023	<u>FOXJ1</u>
	0.862	0.023	<u>SEMA4C</u>
	0.853	0.014	<u>SORL1</u>
	0.873	0.034	<u>NTN1</u>
	0.850	0.011	<u>GADD45G</u>
	0.865	0.026	<u>T</u>
	0.865	0.026	PCDHA10
	0.870	0.032	C6ORF27
	0.889	0.051	<u>CRYBB2</u>
	0.858	0.021	<u>HYAL3</u>
	0.861	0.024	<u>CSRP3</u>
	0.865	0.029	<u>CDKAL1</u>
	0.862	0.026	<u>FGF16</u>
	0.860	0.024	<u>MIA2</u>
	0.863	0.027	<u>GCKR</u>
	0.880	0.045	<u>DNASE1</u>
	0.877	0.041	CA5B
	0.860	0.025	<u>PRKY</u>
	0.859	0.024	<u>PITPNM3</u>
	0.865	0.030	<u>CCDC48</u>
	0.859	0.024	<u>PAX1</u>
	0.877	0.043	<u>MYL3</u>
	0.878	0.044	<u>HNF4G</u>
	0.862	0.028	<u>HIST1H3A</u>
	0.868	0.034	<u>GLRX3</u>
	0.877	0.043	<u>P2RX1</u>
	0.866	0.032	<u>CYP2C19</u>
	0.858	0.024	<u>PRSS21</u>
	0.867	0.034	<u>KCNK13</u>
	0.873	0.039	<u>GHRH</u>
	0.867	0.033	<u>GLTSCR1</u>
	0.866	0.033	<u>ALOX12B</u>
	0.859	0.027	<u>TECTA</u>
	0.854	0.021	<u>AQP8</u>

	0.860	0.028	EFCAB6
	0.869	0.037	<u>ERCC6L</u>
	0.867	0.036	<u>NDOR1</u>
	0.877	0.047	<u>FBXO42</u>
	0.851	0.021	C10ORF92
	0.858	0.030	<u>PDE5A</u>
	0.868	0.040	<u>TREX2</u>
	0.860	0.032	<u>SLC6A4</u>
	0.870	0.043	<u>APOBEC2</u>
	0.870	0.043	<u>HTR3A</u>
	0.858	0.031	<u>PRKCI</u>
	0.852	0.025	<u>LRRC17</u>
	0.870	0.043	<u>SYCP1</u>
	0.856	0.030	<u>VIL1</u>
	0.858	0.031	C1ORF144
	0.840	0.014	<u>BRIP1</u>
	0.842	0.015	<u>CCDC19</u>
	0.849	0.024	<u>PPP4R2</u>
	0.870	0.045	C11ORF20
	0.850	0.025	<u>EN2</u>
	0.857	0.033	<u>HTR6</u>
	0.870	0.045	PCDHGB5
	0.852	0.028	<u>FGF17</u>
	0.843	0.019	<u>VEGFC</u>
	0.849	0.025	<u>HAPLN2</u>
	0.857	0.033	<u>ID2B</u>
	0.859	0.035	PRRG2
	0.857	0.033	ACTL7B
	0.856	0.032	PVRIG
	0.871	0.047	<u>GPRC5D</u>
	0.844	0.021	LRRC36
	0.858	0.034	<u>KCNA4</u>
	0.868	0.045	<u>KLRD1</u>
	0.861	0.038	DEFB126
	0.853	0.030	<u>BMP3</u>
	0.841	0.018	<u>KCNJ15</u>
	0.847	0.025	<u>CDKL1</u>
	0.858	0.036	<u>ESPN</u>
	0.864	0.042	<u>ARVCF</u>
	0.858	0.035	<u>QPCTL</u>
	0.844	0.022	<u>LPA</u>
	0.847	0.026	<u>PRKACG</u>
	0.855	0.034	<u>FERMT1</u>
	0.846	0.025	<u>C2ORF56</u>
	0.848	0.027	ZNF337
	0.849	0.029	<u>FGF3</u>
	0.843	0.023	<u>HIST2H2AA3</u>

	0.851	0.030	<u>FAM120C</u>
	0.860	0.039	<u>SLC6A7</u>
	0.847	0.028	<u>RCVRN</u>
	0.855	0.035	<u>SCNN1G</u>
	0.845	0.026	<u>TAF4B</u>
	0.856	0.037	<u>MYCN</u>
	0.857	0.039	<u>IL1RL2</u>
	0.849	0.031	<u>MYH7</u>
	0.838	0.021	<u>LIPG</u>
	0.844	0.026	<u>KBTBD10</u>
	0.844	0.026	<u>CD160</u>
	0.850	0.033	LOC729164
	0.860	0.043	<u>MUC3A</u>
	0.846	0.029	<u>EXTL1</u>
	0.841	0.025	<u>ATP2A1</u>
	0.848	0.032	<u>CAV3</u>
	0.842	0.026	ZFYVE26
	0.848	0.032	<u>UTS2</u>
	0.851	0.035	<u>TPO</u>
	0.862	0.046	HMHB1
	0.855	0.039	<u>TRAF3IP1</u>
	0.843	0.027	C3ORF75
	0.847	0.032	<u>TNFAIP2</u>
	0.831	0.016	<u>DHX58</u>
	0.835	0.020	<u>HIST1H2BM</u>
	0.851	0.037	<u>CREB3L1</u>
	0.847	0.033	<u>IFNA1</u>
	0.840	0.026	<u>KIF26B</u>
	0.840	0.027	<u>ITGA9</u>
	0.837	0.024	<u>DYSF</u>
	0.853	0.040	MAGOH2
	0.851	0.038	<u>GUCA1A</u>
	0.844	0.031	ZNF280D
	0.837	0.025	<u>RAD54B</u>
	0.845	0.033	FLJ13224
	0.841	0.029	<u>DNMT3L</u>
	0.834	0.023	HRC
	0.848	0.037	<u>NTN3</u>
	0.829	0.018	<u>LEFTY2</u>
	0.839	0.028	<u>C20ORF195</u>
	0.835	0.026	<u>APLNR</u>
	0.855	0.046	<u>TOX</u>
	0.844	0.035	<u>FAM204A</u>
	0.841	0.032	<u>LTC4S</u>
	0.849	0.041	<u>HCN4</u>
	0.842	0.034	ZNF609
	0.841	0.033	<u>KDM6B</u>

	0.852	0.045	CALY
	0.853	0.045	TUBB4
	0.863	0.056	<u>PSG5</u>
	0.845	0.038	<u>CALB2</u>
	0.856	0.050	<u>KIAA1107</u>
	0.838	0.032	<u>HIST1H4L</u>
	0.838	0.033	LOC51145
	0.837	0.032	<u>HIST1H3I</u>
	0.836	0.032	<u>TRPC2</u>
	0.832	0.027	<u>P2RX3</u>
	0.843	0.039	<u>SLC6A16</u>
	0.834	0.030	KRT24
	0.835	0.030	<u>EXOSC1</u>
	0.830	0.026	<u>FBXW4P1</u>
	0.842	0.037	<u>KLRK1</u>
	0.833	0.029	<u>CCDC121</u>
	0.847	0.042	<u>TP53AIP1</u>
	0.825	0.021	RAG2
	0.839	0.035	<u>KLF8</u>
	0.836	0.032	<u>SLC26A10</u>
	0.841	0.037	<u>PCDHA5</u>
	0.826	0.023	<u>MAN1C1</u>
	0.832	0.029	<u>NCRNA00185</u>
	0.834	0.031	<u>NFASC</u>
	0.846	0.044	RPL23AP53
	0.856	0.054	<u>MAML3</u>
	0.836	0.034	<u>CLDN9</u>
	0.853	0.052	<u>PPP2R3A</u>
	0.837	0.036	<u>LAMA1</u>
	0.852	0.051	<u>PSPN</u>
	0.836	0.035	<u>PRDM16</u>
	0.829	0.029	<u>TTC30A</u>
	0.853	0.054	<u>GALR3</u>
	0.845	0.045	<u>TMEM80</u>
	0.845	0.045	<u>C11ORF16</u>
	0.835	0.035	<u>LCN1</u>
	0.827	0.028	<u>KCNC2</u>
	0.836	0.037	<u>ATP9B</u>
	0.837	0.038	<u>C6ORF10</u>
	0.833	0.034	SIX5
	0.822	0.024	<u>IL12B</u>
	0.829	0.031	<u>CINP</u>
	0.829	0.032	<u>HIST1H2AL</u>
	0.841	0.044	<u>RASL10A</u>
	0.826	0.028	<u>NIN</u>
	0.821	0.024	<u>SAGE1</u>
	0.826	0.028	<u>EGR4</u>

	0.835	0.038	<u>CA3</u>
	0.825	0.029	<u>FASTKD2</u>
	0.841	0.045	<u>IFNA16</u>
	0.851	0.055	<u>BTF3P11</u>
	0.827	0.033	<u>PSG11</u>
	0.821	0.026	<u>CDR1</u>
	0.839	0.044	<u>GPSM3</u>
	0.841	0.046	<u>ADORA1</u>
	0.840	0.046	<u>SLC9A7</u>
	0.833	0.040	<u>MAPK8</u>
	0.839	0.045	<u>CYP2W1</u>
	0.844	0.051	<u>NPPA</u>
	0.809	0.015	<u>BRD4</u>
	0.834	0.040	<u>ALOX12</u>
	0.837	0.044	<u>TNFRSF8</u>
	0.832	0.038	<u>TSHZ2</u>
	0.823	0.030	<u>MYH4</u>
	0.815	0.023	<u>TNFSF4</u>
	0.822	0.029	<u>LEP</u>
	0.826	0.034	<u>SLCO5A1</u>
	0.840	0.048	<u>GPR32</u>
	0.841	0.049	<u>PGK2</u>
	0.817	0.025	<u>UBN1</u>
	0.831	0.040	<u>TDRD1</u>
	0.817	0.026	<u>ENTPD3</u>
	0.833	0.042	<u>GUCY2F</u>
	0.822	0.032	<u>GJA3</u>
	0.822	0.032	<u>NAALADL1</u>
	0.818	0.028	<u>FOXC2</u>
	0.812	0.022	<u>HSD17B1</u>
	0.809	0.020	<u>MCF2L-AS1</u>
	0.844	0.055	<u>GRPR</u>
	0.833	0.045	<u>ANKRD53</u>
	0.821	0.033	<u>DNASE1L2</u>
	0.822	0.034	<u>IL24</u>
	0.829	0.041	<u>MGC4859</u>
	0.829	0.042	<u>MKRN3</u>
	0.822	0.035	<u>ETV2</u>
	0.826	0.038	<u>RAI1</u>
	0.843	0.056	<u>LOC441204</u>
	0.828	0.042	<u>ULK4</u>
	0.833	0.046	<u>TMEM143</u>
	0.824	0.038	<u>ZNF682</u>
	0.820	0.034	<u>REN</u>
	0.816	0.030	<u>HIST3H3</u>
	0.826	0.040	<u>ECE1</u>
	0.825	0.040	<u>UBXN1</u>

	0.833	0.048	<u>PRM1</u>
	0.837	0.052	TRAV8-3
	0.825	0.041	<u>RPLP2</u>
	0.820	0.036	<u>BICD1</u>
	0.822	0.038	GNG13
	0.813	0.029	<u>GABRR1</u>
	0.828	0.044	<u>PCDHB11</u>
	0.812	0.028	<u>MNX1</u>
	0.831	0.048	LOC100131532
	0.822	0.039	PKDREJ
	0.832	0.049	<u>BCL2L14</u>
	0.843	0.060	<u>RAPGEF1</u>
	0.819	0.036	<u>SOCS7</u>
	0.822	0.039	<u>MYOG</u>
	0.821	0.039	<u>DYRK2</u>
	0.827	0.045	JMJD5
	0.820	0.038	<u>LGR5</u>
	0.826	0.045	<u>TSPAN2</u>
	0.828	0.047	<u>NPVF</u>
	0.824	0.043	PKI55
	0.810	0.030	<u>CYSLTR1</u>
	0.825	0.045	<u>KCNK7</u>
	0.835	0.055	FGF22
	0.813	0.034	<u>ELP4</u>
	0.812	0.032	<u>ITGA1</u>
	0.806	0.027	<u>UCP2</u>
	0.813	0.033	<u>ABL2</u>
	0.820	0.041	<u>CD244</u>
	0.831	0.052	<u>TRIM46</u>
	0.812	0.033	<u>ATXN3L</u>
	0.814	0.036	<u>GALR1</u>
	0.804	0.026	DKFZP547G183
	0.819	0.041	<u>S1PR5</u>
	0.829	0.051	<u>HOXC5</u>
	0.820	0.044	<u>KRTAP9-9</u>
	0.833	0.056	<u>SLC16A8</u>
	0.802	0.026	<u>ATP9A</u>
	0.807	0.031	<u>COL5A1</u>
	0.820	0.044	<u>ACAP1</u>
	0.810	0.034	<u>OR3A1</u>
	0.833	0.057	<u>DEF6</u>
	0.816	0.040	<u>COL8A1</u>
	0.814	0.038	<u>DHODH</u>
	0.806	0.030	KLRAP1
	0.811	0.036	<u>SRSF11</u>
	0.822	0.047	<u>ADRB1</u>
	0.806	0.031	C8ORF84

	0.825	0.050	<u>TAPT1</u>
	0.823	0.048	<u>C9ORF53</u>
	0.820	0.045	<u>CELP</u>
	0.813	0.038	<u>NPPC</u>
	0.806	0.032	C15ORF5
	0.833	0.059	<u>LTK</u>
	0.812	0.038	ZNF484
	0.814	0.040	<u>CACNA2D1</u>
	0.809	0.035	<u>LSAMP</u>
	0.800	0.027	<u>PORCN</u>
	0.811	0.038	<u>PLXNA2</u>
	0.825	0.052	<u>NPAS1</u>
	0.805	0.034	<u>CYP4F2</u>
	0.813	0.041	<u>SMCP</u>
	0.811	0.039	<u>CLEC4E</u>
	0.819	0.047	<u>ACAA2</u>
	0.815	0.044	ZNF442
	0.806	0.035	<u>COL6A3</u>
	0.803	0.032	<u>CDX1</u>
	0.803	0.032	ZMYND10
	0.831	0.061	<u>CCBP2</u>
	0.830	0.060	<u>SPAG11B</u>
	0.823	0.054	<u>SLC19A3</u>
	0.805	0.036	<u>TNFRSF13B</u>
	0.808	0.039	<u>VSTM4</u>
	0.807	0.038	<u>PEG3</u>
	0.807	0.038	<u>MAP3K10</u>
	0.813	0.044	<u>CCDC30</u>
	0.811	0.043	ZP2
	0.815	0.046	<u>SATB2</u>
	0.790	0.022	C14ORF133
	0.807	0.040	<u>RPE65</u>
	0.820	0.052	<u>LGALS14</u>
	0.826	0.058	<u>CDSN</u>
	0.800	0.033	POLR2J4
	0.808	0.041	<u>CLDN11</u>
	0.806	0.039	<u>GPRC5B</u>
	0.811	0.044	<u>ANGPTL7</u>
	0.805	0.039	<u>KLHL23</u>
	0.807	0.041	<u>TMEM19</u>
	0.805	0.040	ZNF253
	0.806	0.040	<u>PURG</u>
	0.807	0.041	<u>BCMO1</u>
	0.802	0.037	<u>GPR132</u>
	0.807	0.042	<u>IL21R</u>
	0.814	0.050	CATSPERG
	0.818	0.053	<u>LOXL3</u>

	0.799	0.035	ZNF257
	0.812	0.047	<u>HIST1H3E</u>
	0.820	0.056	<u>SEZ6L</u>
	0.818	0.054	<u>STK3</u>
	0.809	0.045	<u>PRO2012</u>
	0.791	0.028	<u>PDZD7</u>
	0.805	0.042	<u>PTTG2</u>
	0.800	0.038	GIPR
	0.817	0.055	<u>TGFBF1</u>
	0.799	0.038	<u>ACTL7A</u>
	0.812	0.050	<u>TIAL1</u>
	0.822	0.060	C11ORF41
	0.790	0.028	<u>USP53</u>
	0.810	0.049	<u>OTUB2</u>
	0.793	0.031	<u>C14ORF79</u>
	0.806	0.045	<u>RIBC2</u>
	0.812	0.051	<u>HSD17B3</u>
	0.815	0.054	<u>EDN2</u>
	0.798	0.037	CORO7
	0.817	0.057	<u>DAZL</u>
	0.797	0.039	<u>LRRC2</u>
	0.796	0.038	<u>MCM3AP-AS1</u>
	0.796	0.037	<u>CDKN2D</u>
	0.805	0.047	<u>ATP6AP2</u>
	0.797	0.040	SPATA6
	0.790	0.032	<u>RALGAP1</u>
	0.806	0.048	<u>CCR8</u>
	0.806	0.049	LYZL6
	0.794	0.037	<u>SHBG</u>
	0.789	0.033	<u>PITX2</u>
	0.807	0.051	<u>TMEM209</u>
	0.791	0.035	<u>KIF24</u>
	0.797	0.041	<u>KRT36</u>
	0.806	0.050	<u>GPR63</u>
	0.816	0.060	<u>KCNV1</u>
	0.791	0.036	<u>FOXD3</u>
	0.805	0.050	<u>LMAN1L</u>
	0.800	0.046	<u>ARSD</u>
	0.800	0.046	<u>BPNT1</u>
	0.798	0.044	<u>SOSTDC1</u>
	0.810	0.056	<u>SOX15</u>
	0.784	0.030	GRRP1
	0.793	0.040	C14ORF102
	0.795	0.042	<u>MEP1B</u>
	0.825	0.072	<u>GRIK4</u>
	0.805	0.052	HHLA1
	0.794	0.042	<u>DOC2B</u>

	0.802	0.050	<u>MAGEL2</u>
	0.803	0.051	<u>TEX13B</u>
	0.788	0.036	<u>PCDHGA8</u>
	0.789	0.038	<u>SLC25A17</u>
	0.807	0.056	<u>SCN9A</u>
	0.790	0.039	<u>EVC</u>
	0.808	0.058	<u>EMR3</u>
	0.788	0.038	<u>DUSP26</u>
	0.796	0.047	<u>UTF1</u>
	0.791	0.041	<u>GPR124</u>
	0.814	0.065	<u>MIR600HG</u>
	0.795	0.045	<u>KAZALD1</u>
	0.794	0.045	<u>NTSR2</u>
	0.790	0.041	<u>HTR1A</u>
	0.808	0.060	<u>ITGA4</u>
	0.788	0.039	<u>RFXAP</u>
	0.780	0.032	<u>CCDC87</u>
	0.804	0.057	<u>FXVD1</u>
	0.797	0.049	<u>ZNF528</u>
	0.799	0.052	<u>SOX5</u>
	0.791	0.044	<u>PLAGL2</u>
	0.791	0.044	<u>OPRD1</u>
	0.795	0.048	<u>ATXN7L1</u>
	0.785	0.038	<u>WNT1</u>
	0.789	0.042	<u>TRDN</u>
	0.796	0.050	<u>PTPRC</u>
	0.793	0.047	<u>ADAMTS20</u>
	0.803	0.057	<u>DNAJC28</u>
	0.801	0.055	<u>SCAPER</u>
	0.802	0.056	<u>CACNA1F</u>
	0.795	0.049	<u>GPR25</u>
	0.798	0.053	<u>RPL35A</u>
	0.798	0.053	<u>OR2B2</u>
	0.777	0.032	<u>COLQ</u>
	0.788	0.044	<u>SEMA3F</u>
	0.798	0.054	<u>DCAF4</u>
	0.805	0.062	<u>FZD8</u>
	0.797	0.054	<u>CST8</u>
	0.802	0.060	<u>BMP15</u>
	0.794	0.051	<u>ADAM29</u>
	0.812	0.069	<u>FAM153A</u>
	0.786	0.043	<u>ZNF345</u>
	0.799	0.057	<u>DUSP21</u>
	0.790	0.049	<u>FASLG</u>
	0.793	0.051	<u>IGH@</u>
	0.780	0.039	<u>HAND2</u>
	0.789	0.047	<u>ZNRF4</u>

	0.787	0.046	<u>INPP5D</u>
	0.780	0.040	ZNF204P
	0.790	0.049	<u>RNF208</u>
	0.791	0.050	<u>TREML2</u>
	0.779	0.039	<u>HIST1H4B</u>
	0.785	0.045	<u>TIGD6</u>
	0.800	0.061	<u>TLR6</u>
	0.799	0.059	<u>AGTR2</u>
	0.800	0.060	<u>MIR622</u>
	0.795	0.055	<u>NKX2-8</u>
	0.784	0.045	<u>PCDHA6</u>
	0.778	0.040	<u>SLC22A6</u>
	0.796	0.057	<u>C1ORF95</u>
	0.789	0.050	<u>PBRM1</u>
	0.808	0.070	<u>BCAT2</u>
	0.803	0.065	<u>GPR12</u>
	0.806	0.069	<u>AP2A2</u>
	0.781	0.045	<u>TRPC4</u>
	0.776	0.039	<u>EDNRA</u>
	0.778	0.041	<u>IKZF3</u>
	0.788	0.052	<u>KIAA0485</u>
	0.791	0.055	<u>FAM63B</u>
	0.788	0.052	PDC
	0.790	0.054	<u>POU4F3</u>
	0.795	0.060	<u>KRT84</u>
	0.788	0.052	<u>HOXA6</u>
	0.780	0.045	<u>MYEF2</u>
	0.784	0.049	<u>CHRNA10</u>
	0.781	0.047	<u>YY2</u>
	0.773	0.038	C20ORF46
	0.779	0.044	<u>GABRG3</u>
	0.770	0.036	<u>HIST1H1T</u>
	0.780	0.046	<u>RIC3</u>
	0.803	0.069	<u>EMILIN2</u>
	0.797	0.063	<u>RPL10</u>
	0.791	0.057	<u>TMEM151B</u>
	0.782	0.048	<u>VHL</u>
	0.795	0.061	<u>ST8SIA2</u>
	0.787	0.054	<u>SYNGR1</u>
	0.775	0.043	<u>IL36A</u>
	0.773	0.040	ZNF254
	0.779	0.047	<u>ERC2</u>
	0.794	0.062	<u>ANKFY1</u>
	0.773	0.041	<u>KRT7</u>
	0.800	0.069	<u>TRAF3IP3</u>
	0.782	0.051	<u>UCHL5</u>
	0.799	0.068	<u>SLC4A5</u>

	0.774	0.043	<u>PRDM8</u>
	0.778	0.048	<u>PIN1P1</u>
	0.783	0.053	NEUROG2
	0.789	0.059	<u>KHSRP</u>
	0.775	0.045	<u>RASSF8</u>
	0.776	0.046	SP3P
	0.779	0.050	LOC257152
	0.795	0.066	<u>SLC26A3</u>
	0.799	0.070	DUX2
	0.769	0.040	<u>IL19</u>
	0.772	0.044	<u>HIST1H2BO</u>
	0.781	0.052	<u>TBL1Y</u>
	0.772	0.044	<u>GCM1</u>
	0.775	0.046	C7ORF54
	0.767	0.039	KIAA1704
	0.766	0.038	<u>DDI2</u>
	0.779	0.052	<u>HIST1H4G</u>
	0.772	0.045	<u>GOLGA8A</u>
	0.796	0.069	<u>INSL5</u>
	0.778	0.051	<u>PPY2</u>
	0.764	0.038	<u>SH3D21</u>
	0.785	0.058	LOC57399
	0.772	0.046	GLP2R
	0.786	0.059	<u>INHA</u>
	0.774	0.048	<u>HIST1H2BN</u>
	0.777	0.051	C8ORF60
	0.768	0.042	<u>IL1RAPL1</u>
	0.789	0.063	EDDM3B
	0.776	0.051	ACCN3
	0.796	0.071	<u>FAM90A1</u>
	0.769	0.044	RAD21L1
	0.772	0.047	<u>FFAR3</u>
	0.777	0.053	<u>DIAPH3</u>
	0.768	0.045	<u>TONSL</u>
	0.768	0.045	<u>FBP2</u>
	0.783	0.060	<u>NIPBL</u>
	0.771	0.048	<u>ATP1B4</u>
	0.758	0.035	<u>TNIP3</u>
	0.766	0.043	<u>SOX18</u>
	0.785	0.063	LOC100130741
	0.777	0.055	<u>VPS13C</u>
	0.775	0.052	<u>SEC14L4</u>
	0.758	0.036	<u>KRT8P12</u>
	0.776	0.054	<u>CDX4</u>
	0.764	0.041	<u>PTMS</u>
	0.768	0.046	<u>SPTLC3</u>
	0.768	0.046	LOC284244

	0.783	0.061	<u>C6ORF105</u>
	0.772	0.050	OCM2
	0.785	0.064	<u>BIN2</u>
	0.780	0.058	<u>PDE6H</u>
	0.791	0.070	<u>NMUR1</u>
	0.774	0.054	<u>SNRNP200</u>
	0.768	0.048	<u>SCGB1D1</u>
	0.781	0.061	<u>PDYN</u>
	0.769	0.050	<u>HSF1</u>
	0.806	0.087	<u>CXCR1</u>
	0.752	0.033	<u>CCDC15</u>
	0.774	0.055	ZNF234
	0.749	0.030	<u>RASIP1</u>
	0.760	0.041	<u>ATAD5</u>
	0.785	0.067	<u>TAS2R3</u>
	0.765	0.047	<u>PLXNB2</u>
	0.767	0.050	<u>COX6A2</u>
	0.778	0.061	<u>KRT83</u>
	0.780	0.064	<u>SSX5</u>
	0.781	0.065	<u>CLEC5A</u>
	0.749	0.033	<u>POLI</u>
	0.767	0.051	CXORF36
	0.757	0.041	<u>TRA2A</u>
	0.772	0.057	<u>FAM76A</u>
	0.762	0.046	<u>HMGA1</u>
	0.787	0.072	<u>GCK</u>
	0.778	0.063	<u>WRNIP1</u>
	0.775	0.060	FAM186A
	0.768	0.054	<u>CASC5</u>
	0.773	0.060	<u>ATF6B</u>
	0.762	0.049	<u>MYF6</u>
	0.777	0.064	<u>EIF4G2</u>
	0.770	0.057	<u>LATS1</u>
	0.769	0.056	ZNF74
	0.783	0.071	<u>KCNA10</u>
	0.757	0.045	FSCN2
	0.770	0.058	<u>LARP7</u>
	0.787	0.074	<u>GK2</u>
	0.778	0.066	<u>SYDE1</u>
	0.777	0.065	<u>KIAA1751</u>
	0.753	0.041	<u>OVOL2</u>
	0.775	0.064	<u>SP4</u>
	0.751	0.040	<u>STK17A</u>
	0.770	0.058	ZNF493
	0.754	0.043	<u>BRCA2</u>
	0.770	0.060	MYH8
	0.766	0.056	C20ORF7

	0.744	0.034	<u>FOLR3</u>
	0.750	0.040	<u>SLC13A2</u>
	0.761	0.051	<u>BTBD18</u>
	0.773	0.063	<u>TAS2R8</u>
	0.756	0.047	<u>ZBTB6</u>
	0.766	0.057	<u>POMC</u>
	0.750	0.041	<u>PITX3</u>
	0.757	0.048	<u>UBE2I</u>
	0.779	0.070	<u>VRK3</u>
	0.782	0.073	<u>ITIH4</u>
	0.758	0.050	<u>ZNF223</u>
	0.774	0.067	<u>CNGB3</u>
	0.760	0.053	<u>TAOK2</u>
	0.766	0.059	<u>DOT1L</u>
	0.778	0.072	<u>PFKFB4</u>
	0.775	0.069	<u>KLK15</u>
	0.753	0.047	<u>LOR</u>
	0.754	0.049	<u>MAGEB3</u>
	0.777	0.071	<u>MYO3A</u>
	0.763	0.058	<u>GJC1</u>
	0.759	0.055	<u>SEMA3A</u>
	0.766	0.061	<u>PTH</u>
	0.763	0.058	<u>BTNL3</u>
	0.751	0.047	<u>ZNF157</u>
	0.776	0.072	<u>PLA2G2E</u>
	0.770	0.067	<u>ABCB9</u>
	0.768	0.065	<u>C3ORF32</u>
	0.776	0.073	<u>CACNG1</u>
	0.783	0.081	<u>GRIA1</u>
	0.772	0.069	<u>AVIL</u>
	0.766	0.063	<u>METTL19</u>
	0.772	0.070	<u>KIR2DS4</u>
	0.775	0.073	<u>GABARAPL3</u>
	0.759	0.057	<u>SLC13A1</u>
	0.756	0.054	<u>MCF2L2</u>
	0.773	0.071	<u>PDE3B</u>
	0.760	0.058	<u>DTNB</u>
	0.745	0.044	<u>NEUROG3</u>
	0.768	0.066	<u>DGKQ</u>
	0.758	0.057	<u>PRDM10</u>
	0.764	0.064	<u>HOXD12</u>
	0.776	0.076	<u>LINC00483</u>
	0.745	0.045	<u>C3ORF36</u>
	0.743	0.042	<u>CHML</u>
	0.757	0.057	<u>CARD10</u>
	0.759	0.059	<u>CGGBP1</u>
	0.780	0.080	<u>OR12D3</u>

0.750	0.051	<u>OR3A2</u>
0.752	0.053	<u>LHCGR</u>
0.767	0.068	TUBB4Q
0.754	0.055	<u>ZDHC17</u>
0.760	0.062	<u>CBFA2T2</u>
0.767	0.068	<u>WNT3</u>
0.768	0.069	SDK2
0.760	0.062	NHLH2
0.761	0.063	MYOZ3
0.763	0.065	<u>PLEKHM1</u>
0.755	0.057	<u>MAPK4</u>
0.776	0.078	RIMS1
0.756	0.058	<u>ROS1</u>
0.758	0.060	<u>CPSF1</u>
0.764	0.066	<u>C22ORF43</u>
0.737	0.040	<u>P2RY10</u>
0.756	0.059	<u>HGF</u>
0.757	0.061	<u>AZU1</u>
0.757	0.061	LOC1720
0.750	0.054	<u>GALNT3</u>
0.764	0.069	<u>METTL10</u>
0.753	0.058	<u>TRIM17</u>
0.752	0.056	C21ORF62
0.775	0.079	<u>BRS3</u>
0.771	0.076	<u>HCRT</u>
0.771	0.076	C22ORF24
0.774	0.079	POU6F2
0.751	0.057	<u>NSL1</u>
0.760	0.066	<u>DNAH2</u>
0.755	0.061	TCP11
0.759	0.065	<u>CYP2U1</u>
0.749	0.055	<u>CNTN6</u>
0.752	0.059	<u>DPH5</u>
0.743	0.050	<u>GCM2</u>
0.752	0.059	<u>RPL5</u>
0.769	0.076	<u>MC3R</u>
0.752	0.060	<u>MRPS18C</u>
0.752	0.060	<u>TBC1D30</u>
0.759	0.067	<u>PCDHGA11</u>
0.758	0.067	ZIC4
0.745	0.054	<u>UCP1</u>
0.737	0.046	WDR52
0.751	0.060	<u>RFC1</u>
0.747	0.056	<u>EPB41L4A</u>
0.747	0.057	<u>PRKD1</u>
0.749	0.058	KRTAP5-9
0.745	0.055	<u>DGKE</u>

0.749	0.059	CT62
0.750	0.060	<u>EXOC6B</u>
0.761	0.071	<u>PMS2P4</u>
0.772	0.083	GPR3
0.748	0.059	AGBL3
0.758	0.068	ZNF81
0.738	0.049	FOXL1
0.747	0.058	CCDC33
0.754	0.066	LOC100134713
0.754	0.066	<u>TSNAXIP1</u>
0.762	0.074	<u>MRE11A</u>
0.749	0.061	<u>MYO1A</u>
0.762	0.075	<u>RPS6KA6</u>
0.769	0.082	LOC440792
0.743	0.056	<u>IQCH</u>
0.783	0.096	<u>NXPH4</u>
0.757	0.071	<u>TTC18</u>
0.754	0.068	<u>ARL2BP</u>
0.742	0.056	<u>SLC25A21</u>
0.755	0.069	<u>OLFM1</u>
0.727	0.042	<u>CRELD2</u>
0.741	0.056	<u>ERGIC3</u>
0.743	0.058	<u>PROSC</u>
0.744	0.059	<u>PLK4</u>
0.736	0.052	<u>LRRC8B</u>
0.743	0.059	<u>OTOF</u>
0.755	0.071	<u>IFNAR1</u>
0.762	0.079	<u>PCDHB6</u>
0.738	0.054	AMELX
0.773	0.089	<u>ADAMTS8</u>
0.746	0.063	<u>UGGT1</u>
0.741	0.058	<u>CSN2</u>
0.749	0.066	<u>TNFSF11</u>
0.752	0.069	<u>FRAS1</u>
0.770	0.087	PPBPL2
0.744	0.061	ZNF41
0.746	0.064	PCDHGA10
0.752	0.070	<u>OMP</u>
0.761	0.079	DNAH6
0.766	0.085	CHST4
0.768	0.086	LRRC68
0.748	0.067	C2ORF55
0.734	0.053	<u>NOL10</u>
0.748	0.067	<u>ATXN2L</u>
0.755	0.073	<u>GNPTAB</u>
0.734	0.054	<u>DLC1</u>
0.720	0.040	<u>ATG2B</u>

	0.753	0.073	<u>TTC12</u>
	0.742	0.062	<u>CFHR4</u>
	0.746	0.067	<u>TSGA10</u>
	0.736	0.057	<u>CETP</u>
	0.742	0.064	<u>KLHL29</u>
	0.741	0.063	<u>CCDC144A</u>
	0.758	0.080	PLA2G2F
	0.737	0.059	FAM205B
	0.721	0.043	<u>SIDT1</u>
	0.736	0.058	<u>LIM2</u>
	0.741	0.063	<u>RFPL1</u>
	0.736	0.058	RAB9BP1
	0.736	0.058	FOXH1
	0.731	0.053	ZNF225
	0.738	0.060	<u>SCIN</u>
	0.732	0.055	<u>PHF14</u>
	0.756	0.079	<u>JPH3</u>
	0.753	0.076	<u>PART1</u>
	0.732	0.055	<u>DPF1</u>
	0.741	0.065	<u>HIST1H2BL</u>
	0.743	0.067	TCP10
	0.741	0.064	<u>SLC25A42</u>
	0.722	0.046	<u>FRAT1</u>
	0.742	0.065	<u>TRAF3IP2</u>
	0.749	0.073	<u>GRIA4</u>
	0.735	0.059	<u>CACNA1C</u>
	0.726	0.050	ZNF273
	0.730	0.054	<u>GTPBP10</u>
	0.743	0.068	<u>PDE4B</u>
	0.750	0.075	<u>KCNE1</u>
	0.737	0.063	<u>SRSF7</u>
	0.739	0.065	<u>TELO2</u>
	0.746	0.072	<u>RAPSN</u>
	0.744	0.070	<u>GAN</u>
	0.739	0.065	<u>LAT2</u>
	0.745	0.072	<u>CRB1</u>
	0.741	0.068	<u>PEX5</u>
	0.725	0.053	<u>CEP97</u>
	0.732	0.061	<u>POU3F3</u>
	0.752	0.081	C2ORF83
	0.751	0.081	<u>CRYBB1</u>
	0.746	0.076	<u>SLC6A5</u>
	0.723	0.053	<u>PRR14L</u>
	0.741	0.072	<u>MLLT1</u>
	0.735	0.065	<u>POLRMT</u>
	0.719	0.049	KRT76
	0.734	0.065	<u>SLC7A4</u>

	0.732	0.063	PCDHB1
	0.727	0.059	<u>TMEM156</u>
	0.750	0.082	<u>GREB1L</u>
	0.726	0.058	<u>IFIH1</u>
	0.739	0.072	<u>HTR1B</u>
	0.732	0.064	<u>ACOXL</u>
	0.746	0.078	FLJ20712
	0.732	0.065	OR7E24
	0.726	0.059	<u>EFNA2</u>
	0.719	0.052	<u>GHSR</u>
	0.721	0.054	<u>MPPED2</u>
	0.732	0.066	<u>STAG3L4</u>
	0.725	0.059	<u>SEN6</u>
	0.744	0.079	<u>AGA</u>
	0.743	0.077	<u>CEACAM7</u>
	0.733	0.067	<u>FAM135A</u>
	0.714	0.049	<u>DUSP13</u>
	0.731	0.065	<u>PACRG</u>
	0.719	0.054	<u>ARHGEF10</u>
	0.747	0.082	<u>ADM2</u>
	0.731	0.065	<u>SPACA1</u>
	0.720	0.054	<u>GPR77</u>
	0.721	0.056	<u>HIST1H4D</u>
	0.724	0.060	<u>MYH7B</u>
	0.725	0.061	<u>LINC00115</u>
	0.741	0.077	<u>TBX4</u>
	0.728	0.064	<u>BPESC1</u>
	0.723	0.060	<u>SPO11</u>
	0.746	0.082	<u>TGFB2</u>
	0.713	0.050	<u>TIPARP</u>
	0.717	0.054	ARHGEF38
	0.735	0.073	ZNF208
	0.727	0.065	<u>GP6</u>
	0.722	0.061	<u>EPHX3</u>
	0.729	0.068	LRIT1
	0.730	0.069	NEUROD4
	0.734	0.073	<u>NRXN3</u>
	0.730	0.070	<u>ADAM20</u>
	0.720	0.060	<u>IFNB1</u>
	0.734	0.074	<u>RFX3</u>
	0.726	0.066	<u>HSPG2</u>
	0.751	0.092	<u>EXOSC2</u>
	0.736	0.077	POM121
	0.720	0.061	PCDHGA9
	0.732	0.073	OR2B6
	0.704	0.045	<u>HIC1</u>
	0.729	0.071	<u>SRY</u>

	0.721	0.062	TULP1
	0.716	0.057	<u>PLEK</u>
	0.746	0.087	<u>OBSCN</u>
	0.723	0.064	<u>OR7A10</u>
	0.712	0.054	<u>FAM46C</u>
	0.732	0.074	ANKRD34C
	0.739	0.082	<u>BARX1</u>
	0.721	0.064	<u>RBM3</u>
	0.724	0.068	ZNF214
	0.727	0.071	NDST3
	0.725	0.069	<u>TROVE2</u>
	0.732	0.076	ZNF701
	0.727	0.071	<u>PAX9</u>
	0.734	0.078	<u>HIST1H1A</u>
	0.738	0.083	<u>CNOT2</u>
	0.712	0.057	<u>TLL3</u>
	0.717	0.062	ZNF80
	0.717	0.062	<u>HOXA2</u>
	0.724	0.069	<u>CNTN5</u>
	0.736	0.081	<u>CYSLTR2</u>
	0.717	0.063	<u>NR2C2</u>
	0.710	0.056	<u>SGCA</u>
	0.730	0.076	ZNF132
	0.726	0.072	<u>IL12RB1</u>
	0.711	0.058	<u>CSDA</u>
	0.717	0.063	<u>AGBL2</u>
	0.729	0.076	<u>FBXO4</u>
	0.725	0.072	<u>FGF23</u>
	0.732	0.080	C6ORF123
	0.736	0.084	<u>LY6G6E</u>
	0.726	0.073	<u>TLL1</u>
	0.741	0.088	<u>IFNA4</u>
	0.729	0.077	<u>SH2D3C</u>
	0.712	0.059	<u>BBS7</u>
	0.723	0.071	<u>SIK2</u>
	0.724	0.072	<u>TDRKH</u>
	0.726	0.074	<u>USH2A</u>
	0.725	0.074	RPA4
	0.738	0.088	<u>INE1</u>
	0.720	0.069	LALBA
	0.729	0.079	<u>EIF3F</u>
	0.725	0.075	OR7E87P
	0.720	0.070	<u>SCNN1A</u>
	0.729	0.079	<u>KCNC1</u>
	0.728	0.079	<u>ST8SIA3</u>
	0.724	0.075	<u>OBP2A</u>
	0.724	0.075	<u>GRK1</u>

	0.734	0.086	GPR85
	0.714	0.066	PCDH11X
	0.721	0.073	<u>PHLDB1</u>
	0.724	0.076	<u>HBEGF</u>
	0.734	0.086	<u>CHAT</u>
	0.695	0.048	<u>TRAT1</u>
	0.717	0.070	ACCN4
	0.731	0.085	<u>COL4A6</u>
	0.716	0.070	<u>PGLYRP1</u>
	0.731	0.085	<u>SCN8A</u>
	0.733	0.087	<u>ABCD2</u>
	0.717	0.072	<u>PRX</u>
	0.703	0.057	<u>SLC22A18AS</u>
	0.721	0.076	<u>HAUS5</u>
	0.723	0.078	CRYGA
	0.738	0.093	GBX1
	0.706	0.061	PIWIL1
	0.734	0.089	<u>AGRP</u>
	0.714	0.070	<u>SOX1</u>
	0.712	0.068	<u>HLA-DRB4</u>
	0.712	0.068	<u>MSH4</u>
	0.732	0.089	<u>TGM4</u>
	0.706	0.063	<u>HOXB8</u>
	0.711	0.068	ANKRD7
	0.714	0.071	<u>CEACAM1</u>
	0.706	0.063	TPTE
	0.721	0.079	<u>SLC14A2</u>
	0.699	0.058	C6ORF103
	0.729	0.088	<u>STXBP5L</u>
	0.731	0.091	LINC00474
	0.724	0.084	<u>RALGPS1</u>
	0.718	0.078	<u>TMC7</u>
	0.713	0.073	<u>ATOH1</u>
	0.719	0.079	ASIP
	0.710	0.070	<u>TP73</u>
	0.717	0.078	<u>CADPS</u>
	0.723	0.084	<u>NTNG1</u>
	0.720	0.081	<u>FOXM2</u>
	0.699	0.060	<u>ELK3</u>
	0.717	0.079	<u>GJA5</u>
	0.714	0.076	NACA2
	0.717	0.079	ZNF674
	0.707	0.069	<u>FOXB1</u>
	0.695	0.057	<u>ASCL2</u>
	0.692	0.055	<u>EIF3M</u>
	0.720	0.083	<u>GUCY2C</u>
	0.705	0.069	<u>CCDC134</u>

	0.718	0.082	<u>RANBP1</u>
	0.719	0.083	<u>AGRN</u>
	0.736	0.101	<u>PCDHB8</u>
	0.721	0.086	<u>AMELY</u>
	0.721	0.086	<u>PARK2</u>
	0.722	0.087	<u>PLEKHH3</u>
	0.721	0.086	<u>IQCA1</u>
	0.722	0.088	<u>CDH15</u>
	0.715	0.082	<u>KIAA1967</u>
	0.707	0.073	<u>GRIN2D</u>
	0.720	0.086	<u>HNMT</u>
	0.710	0.076	<u>CRTC1</u>
	0.693	0.061	<u>C9ORF68</u>
	0.721	0.089	<u>NLGN4Y</u>
	0.696	0.064	<u>WDR96</u>
	0.697	0.066	<u>AMPD3</u>
	0.707	0.075	<u>RPS28</u>
	0.708	0.076	<u>RAB40A</u>
	0.697	0.065	<u>IGFBP7</u>
	0.718	0.087	<u>OR11A1</u>
	0.705	0.074	<u>GUCY2D</u>
	0.710	0.079	<u>KDM4C</u>
	0.692	0.062	<u>LPHN3</u>
	0.697	0.068	<u>CXCL3</u>
	0.700	0.070	<u>MARCH6</u>
	0.714	0.084	<u>DAB1</u>
	0.703	0.074	<u>HIST1H4F</u>
	0.712	0.084	<u>PBOV1</u>
	0.720	0.093	<u>BRDT</u>
	0.724	0.097	<u>PRG3</u>
	0.707	0.080	<u>GRID2</u>
	0.680	0.054	<u>DCAF13</u>
	0.710	0.083	<u>ERCC4</u>
	0.707	0.081	<u>LOC100505960</u>
	0.710	0.085	<u>CSF2</u>
	0.711	0.086	<u>PEX16</u>
	0.709	0.083	<u>FBN1</u>
	0.705	0.080	<u>GLI1</u>
	0.694	0.069	<u>MGAT4C</u>
	0.706	0.082	<u>C14ORF56</u>
	0.699	0.075	<u>EDDM3A</u>
	0.681	0.056	<u>MXD1</u>
	0.725	0.101	<u>C19ORF50</u>
	0.695	0.071	<u>LCMT2</u>
	0.704	0.080	<u>ATP8A2</u>
	0.726	0.102	<u>PREX2</u>
	0.695	0.071	<u>GTF2A1</u>

	0.707	0.084	<u>TRMT1</u>
	0.715	0.092	<u>LRRC41</u>
	0.710	0.087	NPHP1
	0.707	0.085	<u>SLC8A1</u>
	0.723	0.101	<u>PNMA2</u>
	0.720	0.099	<u>IFNW1</u>
	0.712	0.091	<u>KLF15</u>
	0.701	0.080	<u>C16ORF71</u>
	0.706	0.086	<u>PTCH2</u>
	0.718	0.098	MBL1P
	0.700	0.080	<u>CDH9</u>
	0.697	0.077	<u>ZBTB7B</u>
	0.698	0.079	<u>GLS</u>
	0.695	0.076	FSTL4
	0.693	0.074	<u>PHEX</u>
	0.702	0.083	<u>RGS11</u>
	0.677	0.058	ARHGAP33
	0.685	0.067	<u>LNPEP</u>
	0.682	0.063	<u>ZBTB7C</u>
	0.717	0.098	<u>FAM125B</u>
	0.711	0.093	<u>SH2D2A</u>
	0.709	0.091	<u>MTSS1</u>
	0.696	0.078	<u>IGKV1-5</u>
	0.694	0.077	<u>OBFC2A</u>
	0.700	0.083	<u>AREG</u>
	0.693	0.077	<u>ZBTB32</u>
	0.691	0.074	<u>WDHD1</u>
	0.672	0.056	<u>GNRH1</u>
	0.688	0.072	<u>KLHL28</u>
	0.710	0.094	<u>NUP205</u>
	0.698	0.082	OR2F2
	0.704	0.089	ZNF467
	0.695	0.080	NYX
	0.692	0.077	<u>CHD4</u>
	0.704	0.090	<u>NUP88</u>
	0.706	0.091	ZNF259P1
	0.691	0.076	<u>GIP</u>
	0.680	0.066	IGLV6-57
	0.686	0.072	MGC13053
	0.694	0.081	LOC100130354
	0.687	0.074	<u>ASB4</u>
	0.692	0.079	<u>FOXD2</u>
	0.698	0.086	ADAM30
	0.711	0.099	<u>TBX10</u>
	0.695	0.084	<u>DRD5</u>
	0.699	0.088	<u>SLC25A30</u>
	0.693	0.082	<u>THAP9</u>

	0.685	0.075	<u>CKAP4</u>
	0.699	0.089	<u>CSDC2</u>
	0.691	0.082	<u>TTC38</u>
	0.656	0.047	<u>TXNL1</u>
	0.656	0.047	<u>NID2</u>
	0.688	0.079	CLUL1
	0.691	0.083	<u>CSPG4</u>
	0.694	0.085	<u>MYH13</u>
	0.680	0.072	<u>MYB</u>
	0.681	0.074	<u>SLC25A16</u>
	0.704	0.097	MYO15A
	0.691	0.084	<u>TRPM2</u>
	0.684	0.077	<u>NR2E1</u>
	0.687	0.080	<u>IFNA10</u>
	0.642	0.036	<u>LCN2</u>
	0.664	0.058	<u>TPR</u>
	0.715	0.110	<u>SOX30</u>
	0.699	0.094	<u>SSTR4</u>
	0.695	0.091	<u>CDADC1</u>
	0.701	0.097	<u>GUCY1B2</u>
	0.699	0.095	<u>ADAM7</u>
	0.686	0.082	LOC100127886
	0.679	0.075	<u>EIF5B</u>
	0.690	0.087	<u>HNRNPA3P1</u>
	0.681	0.078	CATR1
	0.684	0.081	MGC2889
	0.694	0.091	<u>PRSS53</u>
	0.694	0.092	<u>NOD1</u>
	0.684	0.082	<u>PDE6C</u>
	0.685	0.083	<u>RAVER2</u>
	0.683	0.081	TRBC2
	0.698	0.096	<u>BAIAP2</u>
	0.690	0.088	<u>KIR3DX1</u>
	0.686	0.085	<u>CHD2</u>
	0.688	0.088	<u>ZBTB33</u>
	0.678	0.079	LINC00230A
	0.692	0.093	<u>KRTAP5-8</u>
	0.701	0.101	<u>KCNA1</u>
	0.671	0.071	RPS2P45
	0.680	0.081	<u>ZFY</u>
	0.694	0.094	<u>GFM1</u>
	0.707	0.108	<u>NMBR</u>
	0.700	0.101	<u>FGF8</u>
	0.692	0.094	<u>IL4</u>
	0.690	0.093	RAB40AL
	0.668	0.071	<u>RARS2</u>
	0.697	0.100	<u>IFNA14</u>

	0.688	0.092	<u>TAF13</u>
	0.679	0.083	PCDHB17
	0.688	0.092	ZNF749
	0.680	0.085	<u>ADARB2</u>
	0.645	0.050	<u>CCND2</u>
	0.689	0.095	<u>ADAM3A</u>
	0.691	0.096	<u>PCCA</u>
	0.681	0.086	<u>RFX1</u>
	0.685	0.091	<u>ADCY9</u>
	0.675	0.081	<u>PYHIN1</u>
	0.684	0.090	MORC1
	0.685	0.092	<u>TRPC7</u>
	0.666	0.072	<u>FER</u>
	0.669	0.075	<u>TMF1</u>
	0.691	0.099	<u>ULBP1</u>
	0.692	0.100	SEC14L5
	0.676	0.084	LRRC3
	0.679	0.087	<u>GPR4</u>
	0.689	0.097	<u>GMIP</u>
	0.673	0.082	ACSBG2
	0.684	0.094	<u>TIMM8A</u>
	0.655	0.065	<u>DNMT3A</u>
	0.669	0.078	<u>PRDM5</u>
	0.693	0.103	CETN1
	0.672	0.082	<u>SETD2</u>
	0.686	0.096	<u>PRAMEF11</u>
	0.671	0.081	PRPH2
	0.697	0.107	<u>RAB40C</u>
	0.675	0.085	<u>IDI2-AS1</u>
	0.668	0.078	<u>LRP5L</u>
	0.668	0.079	<u>DUOX1</u>
	0.680	0.091	<u>CCDC82</u>
	0.668	0.078	SYCE1L
	0.690	0.100	<u>ZC3H13</u>
	0.679	0.090	CHD5
	0.678	0.089	<u>CNOT3</u>
	0.666	0.077	<u>NPAS3</u>
	0.679	0.091	<u>CPLX2</u>
	0.691	0.103	<u>PNLIPRP1</u>
	0.670	0.083	<u>NPY6R</u>
	0.672	0.085	<u>ATF7IP</u>
	0.691	0.104	<u>IL3</u>
	0.647	0.060	<u>DYM</u>
	0.670	0.083	<u>BCL3</u>
	0.674	0.087	TPSD1
	0.679	0.092	IFNA6
	0.679	0.093	<u>EDA2R</u>

	0.669	0.083	<u>RSG1</u>
	0.686	0.100	<u>TEC</u>
	0.653	0.067	<u>GABRA6</u>
	0.689	0.104	<u>ACSBG1</u>
	0.674	0.089	<u>RLBP1</u>
	0.664	0.079	<u>SUV39H2</u>
	0.667	0.082	<u>OR1D2</u>
	0.675	0.090	ANKRD36BP2
	0.674	0.089	<u>CCNT2</u>
	0.671	0.087	<u>PKD2L2</u>
	0.684	0.099	<u>DLG2</u>
	0.679	0.095	<u>PTGDR</u>
	0.676	0.092	<u>ABCD1</u>
	0.656	0.073	<u>QSER1</u>
	0.679	0.096	<u>TCF20</u>
	0.671	0.088	ZNF355P
	0.654	0.071	ZNF471
	0.669	0.086	<u>WDR59</u>
	0.686	0.104	<u>MTUS2</u>
	0.676	0.095	MS4A5
	0.670	0.090	<u>IFNA8</u>
	0.676	0.095	CLCA3P
	0.678	0.098	<u>FBXO24</u>
	0.678	0.099	<u>TMEM144</u>
	0.665	0.086	<u>PHC3</u>
	0.666	0.088	<u>GARNL3</u>
	0.680	0.102	<u>C16ORF3</u>
	0.688	0.110	<u>IL9</u>
	0.671	0.094	<u>TTY2</u>
	0.674	0.097	<u>ACR</u>
	0.682	0.105	<u>OR2C1</u>
	0.677	0.101	<u>OR1F2P</u>
	0.653	0.077	<u>NDST1</u>
	0.675	0.100	<u>CDS1</u>
	0.651	0.076	<u>ALPI</u>
	0.677	0.103	ZNF835
	0.681	0.107	<u>SMAD4</u>
	0.672	0.099	<u>KRT35</u>
	0.657	0.084	LOC100129973
	0.677	0.104	<u>F2RL3</u>
	0.653	0.080	ZNF480
	0.671	0.099	SOX14
	0.664	0.094	<u>ATP2B3</u>
	0.672	0.102	<u>PRR5</u>
	0.676	0.106	KCNJ9
	0.679	0.110	<u>CCZ1</u>
	0.674	0.105	<u>PRND</u>

	0.670	0.102	<u>GAP43</u>
	0.665	0.097	<u>EHMT1</u>
	0.661	0.094	<u>ATP10B</u>
	0.667	0.099	<u>EPHB1</u>
	0.640	0.073	<u>THOC5</u>
	0.655	0.088	<u>ANAPC13</u>
	0.655	0.089	<u>FAM182A</u>
	0.656	0.090	<u>SERPINB7</u>
	0.654	0.089	<u>TEX12</u>
	0.672	0.107	<u>GCNT2</u>
	0.659	0.094	<u>PDPN</u>
	0.673	0.109	<u>GAL</u>
	0.652	0.087	<u>C6ORF25</u>
	0.650	0.086	<u>C8ORF71</u>
	0.659	0.095	<u>BFSP2</u>
	0.637	0.074	<u>ANK1</u>
	0.650	0.086	<u>CSRNP3</u>
	0.664	0.101	<u>SYT12</u>
	0.665	0.102	<u>SEC14L3</u>
	0.652	0.089	<u>GALR2</u>
	0.646	0.084	<u>SOX21</u>
	0.660	0.098	<u>CDY1</u>
	0.661	0.101	<u>HOXD1</u>
	0.673	0.112	<u>KRTAP4-7</u>
	0.659	0.099	<u>XRCC6</u>
	0.657	0.098	<u>SPICE1</u>
	0.642	0.084	<u>TADA2A</u>
	0.645	0.086	<u>FARS2</u>
	0.659	0.102	<u>KRTAP1-3</u>
	0.662	0.104	<u>B3GALT5</u>
	0.653	0.095	<u>RFPL1-AS1</u>
	0.665	0.108	<u>TAS2R16</u>
	0.671	0.114	<u>ZBED4</u>
	0.653	0.097	<u>DOPEY1</u>
	0.647	0.090	<u>SIGLEC8</u>
	0.655	0.099	<u>SRRM2</u>
	0.637	0.082	<u>CSNK2A1</u>
	0.648	0.093	<u>HIPK2</u>
	0.648	0.094	<u>ZPBP</u>
	0.649	0.094	<u>IFNA2</u>
	0.658	0.103	<u>KANK2</u>
	0.629	0.075	<u>CYP19A1</u>
	0.638	0.084	<u>TREH</u>
	0.659	0.105	<u>CHRNA2</u>
	0.655	0.101	<u>CDON</u>
	0.655	0.102	<u>CTAGE1</u>
	0.647	0.094	<u>OLAH</u>

	0.661	0.109	ZSCAN12
	0.664	0.112	<u>SHOX2</u>
	0.651	0.099	<u>GLRA1</u>
	0.645	0.093	<u>PLIN2</u>
	0.653	0.102	<u>CAMK4</u>
	0.660	0.109	<u>EPHA1</u>
	0.667	0.115	<u>FNTB</u>
	0.661	0.110	NSUN7
	0.637	0.086	<u>RAB30</u>
	0.651	0.100	<u>MLN</u>
	0.646	0.095	<u>VCPIP1</u>
	0.653	0.103	ZXDB
	0.660	0.110	<u>HYDIN</u>
	0.649	0.099	<u>RNF24</u>
	0.663	0.113	<u>OR1E1</u>
	0.654	0.104	<u>CYP2B6</u>
	0.629	0.080	<u>KIAA0196</u>
	0.662	0.114	GPR172B
	0.653	0.105	<u>POU2F3</u>
	0.651	0.103	<u>RASSF4</u>
	0.645	0.098	TCEB3B
	0.646	0.099	<u>C16ORF70</u>
	0.641	0.094	<u>SCRT1</u>
	0.655	0.108	<u>MTNR1A</u>
	0.654	0.108	PPP1R2P9
	0.650	0.105	<u>FBXO41</u>
	0.635	0.089	HEATR8
	0.635	0.089	<u>PLA2R1</u>
	0.631	0.086	<u>CDKL2</u>
	0.651	0.106	<u>MINK1</u>
	0.657	0.112	LOC100093698
	0.637	0.093	<u>CHRNA4</u>
	0.646	0.102	<u>IMPG1</u>
	0.644	0.100	<u>S1PR2</u>
	0.646	0.102	<u>ERC1</u>
	0.659	0.115	<u>OR2W1</u>
	0.649	0.105	<u>POU3F4</u>
	0.648	0.104	<u>SERPINA9</u>
	0.649	0.105	GSC2
	0.666	0.123	<u>IL11</u>
	0.634	0.092	<u>KRT31</u>
	0.643	0.100	<u>PRKAB1</u>
	0.656	0.114	LOC100131825
	0.631	0.090	<u>SLC4A10</u>
	0.629	0.088	<u>PDK3</u>
	0.646	0.105	<u>SLC2A4</u>
	0.650	0.109	FOXO3

	0.636	0.095	<u>POU2F2</u>
	0.641	0.100	<u>CTDSPL</u>
	0.639	0.098	<u>PCLO</u>
	0.632	0.092	<u>PTGIS</u>
	0.625	0.085	<u>TMX4</u>
	0.644	0.104	<u>FAM13C</u>
	0.648	0.108	<u>FAM49B</u>
	0.649	0.109	<u>VAV2</u>
	0.662	0.123	<u>P2RY4</u>
	0.639	0.100	CRYBA1
	0.638	0.099	<u>KIAA0087</u>
	0.641	0.102	<u>KCNH1</u>
	0.652	0.113	<u>LPAR4</u>
	0.642	0.104	<u>AKT3</u>
	0.645	0.106	<u>GJB4</u>
	0.626	0.088	<u>MAP3K9</u>
	0.641	0.103	<u>PRM2</u>
	0.638	0.100	<u>PIGC</u>
	0.631	0.093	<u>IKZF2</u>
	0.646	0.109	<u>LGALS13</u>
	0.650	0.114	LOC100128640
	0.641	0.105	<u>STAMBPL1</u>
	0.653	0.118	<u>IFNA7</u>
	0.641	0.106	<u>HSDL2</u>
	0.640	0.105	<u>NOX3</u>
	0.654	0.121	<u>MTMR10</u>
	0.642	0.109	CCDC40
	0.647	0.114	<u>NR4A1</u>
	0.631	0.098	<u>WWTR1</u>
	0.619	0.086	<u>OTUD4</u>
	0.626	0.093	C22ORF31
	0.640	0.108	<u>CMA1</u>
	0.634	0.101	<u>ILF3</u>
	0.636	0.104	<u>PAPOLB</u>
	0.617	0.085	<u>CCDC70</u>
	0.631	0.099	FN3K
	0.632	0.101	<u>MCF2L</u>
	0.615	0.084	<u>GFRA3</u>
	0.635	0.104	<u>PBX2</u>
	0.635	0.104	<u>TGM5</u>
	0.651	0.120	<u>SEPT4</u>
	0.630	0.100	<u>GREB1</u>
	0.659	0.129	<u>INTS1</u>
	0.619	0.089	<u>HMGA2</u>
	0.614	0.084	<u>SLC1A3</u>
	0.626	0.096	<u>CCNK</u>
	0.633	0.104	<u>ELK1</u>

	0.642	0.113	<u>NCR1</u>
	0.632	0.103	<u>KCNJ3</u>
	0.642	0.113	<u>PCDHGB6</u>
	0.632	0.103	<u>CRYGB</u>
	0.634	0.106	<u>MTL5</u>
	0.650	0.122	<u>HOXD9</u>
	0.645	0.118	<u>LMAN2</u>
	0.633	0.106	<u>SLC39A2</u>
	0.639	0.112	<u>COLEC10</u>
	0.621	0.096	<u>OR10H2</u>
	0.597	0.072	<u>TMOD2</u>
	0.643	0.118	<u>OR1A2</u>
	0.632	0.108	<u>ZNF550</u>
	0.626	0.102	<u>IFNA5</u>
	0.638	0.113	<u>RAB11FIP3</u>
	0.626	0.103	<u>C11ORF1</u>
	0.632	0.109	<u>ARMC9</u>
	0.643	0.120	<u>TFPI</u>
	0.622	0.099	<u>VPS13B</u>
	0.633	0.111	<u>OR2J3</u>
	0.630	0.110	<u>EXOG</u>
	0.637	0.117	<u>CALCR</u>
	0.629	0.109	<u>LIPE</u>
	0.634	0.115	<u>CCT8L2</u>
	0.636	0.117	<u>IFNA17</u>
	0.629	0.110	<u>MTNR1B</u>
	0.627	0.108	<u>TRPC5</u>
	0.623	0.105	<u>RTDR1</u>
	0.634	0.115	<u>HRH3</u>
	0.585	0.067	<u>RAB21</u>
	0.618	0.099	<u>OR10C1</u>
	0.620	0.102	<u>DPY19L1</u>
	0.625	0.108	<u>DPYSL4</u>
	0.619	0.102	<u>FAM75C2</u>
	0.630	0.114	<u>WNT2B</u>
	0.620	0.104	<u>CNR2</u>
	0.619	0.103	<u>NCBP1</u>
	0.618	0.102	<u>FGF6</u>
	0.613	0.097	<u>UPF1</u>
	0.620	0.104	<u>POU3F1</u>
	0.632	0.117	<u>ST3GAL4</u>
	0.635	0.120	<u>CRYBA4</u>
	0.631	0.117	<u>ANKS1B</u>
	0.614	0.100	<u>CABYR</u>
	0.636	0.121	<u>IL1R1</u>
	0.623	0.108	<u>SPRY4</u>
	0.617	0.102	<u>OTUD7B</u>

	0.620	0.106	<u>C10ORF137</u>
	0.623	0.110	<u>PRPS1L1</u>
	0.618	0.105	LOC100507284
	0.621	0.108	<u>YES1</u>
	0.614	0.102	<u>EXPH5</u>
	0.632	0.120	<u>EZR</u>
	0.627	0.115	<u>CBX2</u>
	0.619	0.108	GPR31
	0.625	0.114	C8ORF39
	0.613	0.103	<u>TFAP2B</u>
	0.614	0.104	OR2J2
	0.634	0.124	<u>RGS1</u>
	0.624	0.115	<u>GOLGA6A</u>
	0.621	0.113	<u>IL26</u>
	0.620	0.112	LOC100131298
	0.611	0.103	EPS15L1
	0.622	0.115	<u>GART</u>
	0.628	0.121	<u>GSPT1</u>
	0.614	0.106	<u>KIDINS220</u>
	0.630	0.123	PMFBP1
	0.626	0.119	<u>LSS</u>
	0.627	0.120	<u>GSK3A</u>
	0.613	0.107	SYT2
	0.612	0.107	<u>NAG18</u>
	0.607	0.102	<u>RAX</u>
	0.621	0.116	<u>GJA9</u>
	0.621	0.115	<u>TAS2R14</u>
	0.625	0.120	MAGEC3
	0.624	0.119	<u>MYOF</u>
	0.623	0.119	<u>CD80</u>
	0.619	0.115	<u>OR2H1</u>
	0.615	0.111	DKFZP686O1327
	0.625	0.120	<u>KISS1</u>
	0.605	0.101	<u>AKIRIN2-AS1</u>
	0.613	0.109	<u>AURKA</u>
	0.612	0.109	<u>PARVB</u>
	0.607	0.104	<u>TNFRSF10D</u>
	0.613	0.109	<u>B4GALT6</u>
	0.630	0.126	<u>ILVBL</u>
	0.611	0.108	<u>PTPRN2</u>
	0.629	0.126	C7ORF69
	0.614	0.113	<u>SHH</u>
	0.622	0.120	<u>LILRP2</u>
	0.624	0.122	<u>ADAM18</u>
	0.605	0.104	<u>CNGA3</u>
	0.617	0.116	<u>DGCR2</u>
	0.612	0.111	<u>MAPK8IP1</u>

	0.610	0.109	IGHV5-78
	0.621	0.120	<u>COL19A1</u>
	0.623	0.123	<u>OR7A17</u>
	0.618	0.118	<u>DUS2L</u>
	0.601	0.101	<u>PHF20L1</u>
	0.631	0.131	<u>GPR50</u>
	0.619	0.119	<u>ORC5</u>
	0.619	0.120	<u>SIVA1</u>
	0.583	0.084	<u>CASP3</u>
	0.602	0.103	<u>SLC35F5</u>
	0.617	0.120	<u>MED6</u>
	0.618	0.120	LRRC37BP1
	0.614	0.117	<u>PQLC3</u>
	0.612	0.115	<u>DDX4</u>
	0.609	0.113	PCDHA3
	0.628	0.132	<u>SPAG8</u>
	0.623	0.127	<u>KIAA0509</u>
	0.619	0.124	WSCD2
	0.616	0.121	<u>ABCC6</u>
	0.613	0.118	<u>ICA1</u>
	0.607	0.113	<u>PPEF2</u>
	0.610	0.117	BTN2A3P
	0.600	0.107	<u>RIMS2</u>
	0.592	0.098	<u>COL1A2</u>
	0.608	0.115	<u>AANAT</u>
	0.598	0.105	<u>MPP2</u>
	0.610	0.118	<u>LAMA2</u>
	0.611	0.119	<u>MOS</u>
	0.622	0.130	<u>NCR3</u>
	0.613	0.122	<u>KDSR</u>
	0.607	0.115	<u>CASR</u>
	0.616	0.125	<u>MAF</u>
	0.619	0.128	<u>IFT27</u>
	0.603	0.113	<u>MKRN2</u>
	0.621	0.131	<u>SLC12A5</u>
	0.601	0.113	<u>LRRC23</u>
	0.609	0.121	<u>CNTLN</u>
	0.602	0.114	<u>ADAM8</u>
	0.604	0.116	<u>ADCK4</u>
	0.606	0.119	<u>TNNI3K</u>
	0.594	0.107	<u>XCR1</u>
	0.600	0.113	<u>GRIK5</u>
	0.615	0.128	<u>SPN</u>
	0.618	0.132	LOC100130331
	0.588	0.101	<u>RCHY1</u>
	0.602	0.116	ZNF549
	0.599	0.113	<u>TOP3B</u>

	0.609	0.124	CER1
	0.603	0.118	<u>PLAG1</u>
	0.596	0.111	<u>PPIAL4A</u>
	0.613	0.128	<u>ADRA1B</u>
	0.613	0.128	<u>ACTR2</u>
	0.595	0.110	CRISP1
	0.606	0.122	TEX13A
	0.617	0.134	<u>OSM</u>
	0.607	0.123	<u>TAS2R13</u>
	0.612	0.129	<u>RASAL2</u>
	0.619	0.136	<u>MYO15B</u>
	0.598	0.115	<u>PDE3A</u>
	0.613	0.130	<u>DOPEY2</u>
	0.609	0.127	ZNF221
	0.614	0.132	<u>AMOT</u>
	0.606	0.124	<u>ARFRP1</u>
	0.608	0.126	CG030
	0.607	0.125	<u>POFUT1</u>
	0.603	0.121	<u>CHRNA6</u>
	0.613	0.132	<u>SCUBE3</u>
	0.607	0.127	<u>F12</u>
	0.594	0.114	<u>HTR2A</u>
	0.609	0.130	<u>SNTG2</u>
	0.598	0.118	<u>HBP1</u>
	0.614	0.135	<u>CHRM5</u>
	0.620	0.141	OR7E19P
	0.586	0.108	<u>MEOX2</u>
	0.601	0.125	<u>ETV3</u>
	0.602	0.125	<u>ZBTB44</u>
	0.603	0.128	<u>HCG4B</u>
	0.581	0.105	<u>CSN3</u>
	0.596	0.121	TXNDC3
	0.580	0.104	<u>YIF1B</u>
	0.594	0.119	<u>EPM2A</u>
	0.601	0.126	<u>PDPR</u>
	0.593	0.118	<u>GAST</u>
	0.601	0.127	<u>PEX5L</u>
	0.598	0.124	PRDM9
	0.603	0.129	<u>SHMT1</u>
	0.593	0.120	PPYR1
	0.593	0.121	<u>NEU3</u>
	0.592	0.119	<u>GP2</u>
	0.584	0.113	<u>SEMA3D</u>
	0.602	0.130	<u>ALX4</u>
	0.587	0.116	<u>LBX1</u>
	0.588	0.117	<u>AFF4</u>
	0.596	0.126	<u>MYO5A</u>

	0.593	0.123	<u>PSG4</u>
	0.599	0.129	<u>GPR161</u>
	0.600	0.131	<u>OPN1SW</u>
	0.589	0.120	<u>PDE12</u>
	0.596	0.127	<u>TAL1</u>
	0.599	0.131	<u>COL6A2</u>
	0.603	0.135	ATXN8OS
	0.591	0.123	<u>KRT38</u>
	0.581	0.113	<u>HCFC1</u>
	0.596	0.129	REG1P
	0.583	0.115	<u>DEC1</u>
	0.590	0.123	VN1R1
	0.580	0.114	<u>GPR97</u>
	0.586	0.121	<u>C15ORF39</u>
	0.600	0.135	TAAR2
	0.596	0.131	ZNF695
	0.588	0.124	<u>AGAP2</u>
	0.589	0.124	<u>ISG20L2</u>
	0.541	0.077	<u>CEBPA</u>
	0.591	0.128	<u>SLC24A2</u>
	0.597	0.133	HTR7P1
	0.586	0.123	<u>RUNX1T1</u>
	0.590	0.127	<u>OR10J1</u>
	0.603	0.141	<u>APC2</u>
	0.598	0.136	<u>ZER1</u>
	0.588	0.127	<u>ADAMTS6</u>
	0.589	0.129	TRHR
	0.583	0.123	ZNF343
	0.585	0.125	<u>HDAC11</u>
	0.583	0.123	<u>ANKRD26</u>
	0.593	0.134	<u>GABRA1</u>
	0.573	0.114	<u>FAM120A</u>
	0.586	0.127	<u>CEP152</u>
	0.594	0.135	<u>GLRA3</u>
	0.578	0.120	<u>SLC5A5</u>
	0.599	0.140	<u>PCSK2</u>
	0.538	0.079	<u>KLHL9</u>
	0.589	0.131	<u>KLRC4</u>
	0.588	0.130	<u>HERC4</u>
	0.590	0.133	<u>EHD2</u>
	0.586	0.130	<u>SCN3B</u>
	0.592	0.136	<u>SLC4A7</u>
	0.585	0.129	<u>KIF1A</u>
	0.591	0.135	<u>CLOCK</u>
	0.581	0.126	<u>PDCD6</u>
	0.598	0.143	<u>MICAL2</u>
	0.586	0.131	<u>KIAA1467</u>

0.579	0.125	P2RX6
0.578	0.124	<u>SERPINB2</u>
0.581	0.127	<u>KAZN</u>
0.593	0.140	<u>ATG10</u>
0.579	0.126	<u>PNLIPRP2</u>
0.589	0.137	<u>MSX2</u>
0.582	0.131	<u>FSHR</u>
0.583	0.133	<u>FGF18</u>
0.574	0.124	RBFOX2
0.594	0.144	<u>HOXD3</u>
0.588	0.138	<u>TIAM2</u>
0.517	0.067	<u>STXBP2</u>
0.574	0.125	PP13
0.588	0.140	<u>LAMB4</u>
0.565	0.116	<u>FSHB</u>
0.564	0.116	<u>ZCWPW1</u>
0.585	0.137	AHCYL2
0.567	0.120	<u>HABP4</u>
0.577	0.130	<u>SDHD</u>
0.588	0.141	<u>PRELP</u>
0.571	0.124	<u>ASH1L</u>
0.582	0.134	<u>BPY2</u>
0.580	0.133	DKFZP434C153
0.575	0.128	C3ORF51
0.575	0.128	<u>UBR2</u>
0.570	0.123	<u>CLTA</u>
0.576	0.131	<u>CNTFR</u>
0.578	0.132	<u>IL22</u>
0.566	0.121	<u>KCNMA1</u>
0.564	0.119	<u>GGA3</u>
0.572	0.128	<u>MYH15</u>
0.581	0.138	<u>SPTB</u>
0.572	0.128	<u>PAX5</u>
0.567	0.125	<u>ANP32C</u>
0.593	0.150	<u>MC5R</u>
0.584	0.142	<u>PLCB1</u>
0.568	0.126	<u>FOXA2</u>
0.558	0.117	LRRC37A4
0.561	0.120	<u>UBA6</u>
0.574	0.133	<u>GSG1</u>
0.568	0.127	<u>ELL</u>
0.577	0.136	<u>PSG3</u>
0.573	0.133	GPR75
0.567	0.127	<u>CHRM2</u>
0.562	0.122	<u>SLC25A31</u>
0.586	0.147	<u>TNFRSF9</u>
0.565	0.126	<u>SCN7A</u>

	0.552	0.113	<u>MGAT5</u>
	0.552	0.113	<u>MBNL1</u>
	0.574	0.135	<u>EFHC2</u>
	0.574	0.135	<u>HTR4</u>
	0.583	0.145	ZMPSTE24
	0.576	0.137	<u>RRH</u>
	0.542	0.106	<u>CREB1</u>
	0.585	0.148	<u>RNF5</u>
	0.563	0.127	ZNF688
	0.579	0.143	<u>ADARB1</u>
	0.577	0.141	<u>C4ORF6</u>
	0.575	0.139	<u>PPP2R2B</u>
	0.560	0.126	<u>PDAP1</u>
	0.572	0.137	SLC5A2
	0.561	0.126	UBQLN3
	0.562	0.128	<u>TAF7L</u>
	0.558	0.125	<u>POU1F1</u>
	0.571	0.137	<u>CYP2C8</u>
	0.578	0.145	<u>NIPAL3</u>
	0.570	0.137	<u>SLC28A2</u>
	0.578	0.145	<u>POLG</u>
	0.585	0.152	<u>RBMS2</u>
	0.570	0.137	AURKC
	0.583	0.151	TSKS
	0.573	0.140	<u>ELAC1</u>
	0.564	0.132	<u>ALK</u>
	0.561	0.129	<u>DENND1C</u>
	0.578	0.146	<u>EYA3</u>
	0.552	0.121	<u>RXFP3</u>
	0.582	0.152	<u>OBSL1</u>
	0.555	0.125	<u>HNRPDL</u>
	0.568	0.138	<u>KCNC3</u>
	0.562	0.132	<u>NLRP3</u>
	0.570	0.141	<u>KRIT1</u>
	0.522	0.093	<u>MKNK1</u>
	0.574	0.145	<u>LMF1</u>
	0.565	0.137	<u>TAS2R7</u>
	0.551	0.124	<u>IGF2R</u>
	0.567	0.141	CTAGE11P
	0.573	0.147	<u>PI4K2A</u>
	0.568	0.142	PLSCR2
	0.571	0.145	ZNF277
	0.555	0.129	<u>SLC2A1</u>
	0.559	0.134	<u>ARHGAP24</u>
	0.576	0.151	<u>NEBL</u>
	0.541	0.116	FLJ10038
	0.562	0.139	<u>GPR68</u>

	0.569	0.146	<u>SLCO1A2</u>
	0.551	0.128	C15ORF34
	0.545	0.122	ZNF780B
	0.555	0.133	<u>TAF4</u>
	0.551	0.128	<u>GJC2</u>
	0.571	0.149	KIAA1654
	0.561	0.139	<u>PRDM2</u>
	0.543	0.121	<u>PCDH7</u>
	0.564	0.143	<u>ARID1A</u>
	0.551	0.131	EBF2
	0.567	0.146	<u>TIMM17A</u>
	0.572	0.152	GCNT4
	0.557	0.137	<u>CHIA</u>
	0.556	0.137	<u>CEACAM4</u>
	0.567	0.148	<u>FRMD8</u>
	0.551	0.132	<u>CD5</u>
	0.557	0.139	<u>ADAMTS7</u>
	0.545	0.127	<u>LDHAL6B</u>
	0.549	0.132	<u>ULK2</u>
	0.550	0.134	<u>ADCY1</u>
	0.562	0.146	<u>ZCCHC11</u>
	0.545	0.130	<u>POM121L9P</u>
	0.544	0.129	<u>UBAP2L</u>
	0.550	0.135	<u>ORIG1</u>
	0.559	0.144	<u>RGS14</u>
	0.549	0.135	<u>MMP11</u>
	0.560	0.147	<u>CNGB1</u>
	0.550	0.137	<u>RAPGEF3</u>
	0.554	0.141	<u>MYL4</u>
	0.566	0.154	<u>CA1</u>
	0.541	0.129	LOC730227
	0.543	0.131	<u>CPT1A</u>
	0.546	0.135	<u>GRM1</u>
	0.538	0.127	<u>REPS1</u>
	0.561	0.150	<u>PBXIP1</u>
	0.549	0.138	<u>TCF25</u>
	0.546	0.136	<u>AKAP9</u>
	0.558	0.148	<u>RQCD1</u>
	0.551	0.142	<u>DES</u>
	0.547	0.137	<u>TSHR</u>
	0.538	0.129	C7ORF58
	0.553	0.143	<u>NPBWR2</u>
	0.541	0.132	<u>PTEN</u>
	0.543	0.137	<u>SEMA7A</u>
	0.535	0.128	<u>SLC16A3</u>
	0.554	0.148	<u>HIC2</u>
	0.567	0.161	<u>FEZ1</u>

	0.559	0.153	<u>SYN2</u>
	0.559	0.154	<u>KRTAP2-4</u>
	0.544	0.139	<u>IFNA21</u>
	0.527	0.122	<u>KLHL11</u>
	0.546	0.141	<u>GNAT1</u>
	0.525	0.120	<u>TRIM2</u>
	0.544	0.139	<u>CELF3</u>
	0.544	0.140	<u>CTNS</u>
	0.546	0.141	<u>KCNA2</u>
	0.537	0.133	<u>HOXC11</u>
	0.548	0.144	<u>GGA1</u>
	0.541	0.137	<u>CHRND</u>
	0.543	0.140	<u>PPP1R3A</u>
	0.539	0.136	<u>HNRNPU</u>
	0.541	0.137	<u>AFF1</u>
	0.549	0.147	<u>HNRNPD</u>
	0.549	0.148	<u>CC2D1A</u>
	0.539	0.138	<u>RDH8</u>
	0.551	0.150	<u>ABCB11</u>
	0.539	0.139	<u>PTENP1</u>
	0.531	0.131	<u>ZC3H15</u>
	0.546	0.146	<u>ACRV1</u>
	0.550	0.150	<u>B3GALT1</u>
	0.528	0.129	<u>TLX2</u>
	0.548	0.149	<u>KCNE2</u>
	0.539	0.141	<u>RAPGEF2</u>
	0.553	0.155	<u>TRPC6</u>
	0.513	0.115	<u>TFAP2A</u>
	0.513	0.115	<u>UBE2L3</u>
	0.508	0.110	<u>HOMER2</u>
	0.548	0.151	<u>GPX5</u>
	0.548	0.151	<u>MED18</u>
	0.535	0.138	<u>PMAIP1</u>
	0.553	0.156	<u>ASMT</u>
	0.533	0.136	<u>PARD6B</u>
	0.533	0.136	<u>OR7C1</u>
	0.549	0.152	<u>A4GNT</u>
	0.547	0.151	<u>C1QL1</u>
	0.544	0.148	<u>PVT1</u>
	0.516	0.120	<u>COL3A1</u>
	0.546	0.151	<u>VPS13A</u>
	0.542	0.147	<u>RNASE1</u>
	0.538	0.143	<u>TAF6L</u>
	0.541	0.146	<u>GABRB2</u>
	0.540	0.145	<u>HSD3B1</u>
	0.526	0.132	<u>CCDC28B</u>
	0.533	0.139	<u>KCNV2</u>

0.530	0.136	SPINLW1
0.544	0.152	<u>KCNJ6</u>
0.535	0.143	<u>SLC9A3</u>
0.532	0.141	<u>KCNH6</u>
0.525	0.134	<u>TCP10L</u>
0.540	0.149	BMP10
0.535	0.144	<u>CXORF57</u>
0.543	0.153	<u>BSN</u>
0.540	0.151	<u>TRADD</u>
0.547	0.159	<u>LTBP4</u>
0.545	0.157	<u>ST3GAL6</u>
0.544	0.156	<u>ELAC2</u>
0.540	0.153	<u>ST14</u>
0.533	0.146	<u>GPR137</u>
0.534	0.147	<u>BAZ2B</u>
0.520	0.133	ZNF192
0.542	0.157	C13ORF44
0.540	0.154	<u>DMC1</u>
0.538	0.152	<u>DMPK</u>
0.533	0.148	<u>MLNR</u>
0.523	0.138	LOC100129648
0.534	0.150	<u>FUT3</u>
0.545	0.161	<u>TMEM206</u>
0.528	0.144	<u>FKBP1A</u>
0.520	0.136	<u>BTG4</u>
0.536	0.152	<u>LPAL2</u>
0.536	0.152	<u>ELOVL5</u>
0.544	0.161	<u>TRPM1</u>
0.530	0.148	<u>NEB</u>
0.529	0.146	<u>SPPL2B</u>
0.535	0.153	<u>TNFRSF4</u>
0.532	0.150	<u>MMP27</u>
0.526	0.145	<u>FOXE1</u>
0.543	0.163	KIAA0748
0.526	0.146	<u>LUZP4</u>
0.541	0.161	C15ORF2
0.531	0.152	<u>GRIP1</u>
0.523	0.144	<u>ICOSLG</u>
0.544	0.165	<u>NOVA2</u>
0.524	0.145	<u>DNM2</u>
0.542	0.164	<u>DLX4</u>
0.535	0.158	MYO7B
0.529	0.151	<u>INVS</u>
0.525	0.148	<u>TSHB</u>
0.515	0.138	<u>TAAR5</u>
0.531	0.157	SCN11A
0.525	0.151	<u>GABRA2</u>

	0.535	0.160	<u>UST</u>
	0.529	0.155	<u>BCL2L11</u>
	0.528	0.154	<u>PCDHGA1</u>
	0.517	0.143	<u>PDE11A</u>
	0.529	0.156	<u>PIAS2</u>
	0.518	0.146	GML
	0.521	0.149	<u>PAK7</u>
	0.527	0.154	C4ORF10
	0.529	0.157	<u>NR5A2</u>
	0.506	0.135	<u>SAFB</u>
	0.528	0.158	PSG2
	0.522	0.152	MUC8
	0.522	0.153	<u>DTX3</u>
	0.519	0.151	<u>WAS</u>
	0.520	0.151	<u>TP63</u>
	0.527	0.158	<u>RYR2</u>
	0.502	0.133	<u>ABCF1</u>
	0.522	0.154	<u>TLL4</u>
	0.516	0.147	<u>C14ORF162</u>
	0.523	0.154	<u>KLK10</u>
	0.520	0.152	C17ORF88
	0.514	0.146	<u>EHD1</u>
	0.518	0.151	<u>DISC1</u>
	0.520	0.152	<u>MIP</u>
	0.518	0.151	<u>PER2</u>
	0.525	0.159	DNAJC16
	0.523	0.157	<u>ZBTB7A</u>
	0.529	0.163	<u>FKBP8</u>
	0.503	0.138	<u>RRP8</u>
	0.510	0.145	<u>KIR2DS1</u>
	0.522	0.157	ZNF335
	0.508	0.144	GNAT3
	0.509	0.145	<u>ADAMTSL4</u>
	0.505	0.140	LENEP
	0.532	0.169	<u>KIAA1045</u>
	0.510	0.146	<u>LAG3</u>
	0.511	0.148	<u>USP29</u>
	0.514	0.152	<u>TACSTD2</u>
	0.521	0.159	ZNF440
	0.509	0.148	<u>MCFD2</u>
	0.520	0.159	<u>RAP2A</u>
	0.516	0.155	<u>AKAP1</u>
	0.516	0.156	<u>OGG1</u>
	0.510	0.150	<u>SH3GL3</u>
	0.516	0.156	<u>PCDH11Y</u>
	0.513	0.154	<u>CHRD</u>
	0.515	0.156	<u>TEX15</u>

	0.514	0.155	<u>KIAA0195</u>
	0.518	0.161	<u>KIAA1609</u>
	0.510	0.153	<u>RBMV2FP</u>
	0.526	0.170	<u>SLC22A13</u>
	0.515	0.159	FP588
	0.517	0.161	<u>PAX4</u>
	0.513	0.158	<u>SVEP1</u>
	0.512	0.157	<u>NR2E3</u>
	0.512	0.157	<u>PYGO1</u>
	0.507	0.152	<u>GGTLC2</u>
	0.503	0.148	<u>KHK</u>
	0.502	0.148	<u>SLC22A14</u>
	0.525	0.171	<u>TBC1D2B</u>
	0.508	0.155	<u>HNF1B</u>
	0.509	0.156	<u>NAA11</u>
	0.518	0.167	<u>AHI1</u>
	0.505	0.153	<u>IOCK</u>
	0.508	0.157	<u>DIMT1</u>
	0.513	0.162	<u>CNKSR2</u>
	0.510	0.160	<u>NOTCH3</u>
	0.511	0.161	<u>LDB3</u>
	0.512	0.162	LOC100508797
	0.511	0.162	APOL5
	0.504	0.157	<u>KIAA1456</u>
	0.501	0.154	HR44
	0.506	0.161	<u>KIF2A</u>
	0.521	0.176	<u>SLC22A17</u>
	0.506	0.162	ZNF154
	0.511	0.167	<u>BRF1</u>
	0.503	0.159	<u>RNF185</u>
	0.508	0.165	<u>RASGRP2</u>
	0.505	0.164	ZNF280A
	0.505	0.164	LOC647070
	0.501	0.161	<u>EFNA5</u>
	0.507	0.167	<u>ANK2</u>
	0.501	0.161	<u>SLIT3</u>
	0.504	0.165	<u>ARL4C</u>
	0.501	0.163	<u>PRKAR2A</u>
	0.505	0.169	<u>PCDHA2</u>
	0.502	0.167	<u>TAS2R4</u>
	0.508	0.174	<u>HPCAL4</u>
	0.504	0.173	<u>FLT1</u>
	0.501	0.171	<u>CCHCR1</u>
	0.504	0.177	<u>PCYT1B</u>
	0.501	0.178	<u>CSNK1G1</u>

Combination prediction result

<u>Name</u>	<u>Overlap count</u>	<u>Up</u>	<u>Down</u>	<u>Result</u>
<u>INS</u>	4	2	2	
<u>ABHD10</u>	3	1	2	
<u>AFF4</u>	3	2	1	
<u>AURKA</u>	3	2	1	
<u>CAMKK2</u>	3	2	1	
<u>CAT</u>	3	2	1	
<u>CETP</u>	3	1	2	
<u>DCAF17</u>	3	1	2	
<u>DIAPH2</u>	3	1	2	
<u>DPF1</u>	3	1	2	
<u>FBXO42</u>	3	2	1	
<u>FKBP5</u>	3	2	1	
<u>GPR19</u>	3	1	2	
<u>ID1</u>	3	3	0	
<u>IGF2R</u>	3	3	0	
<u>KRT3</u>	3	1	2	
<u>MAP3K9</u>	3	2	1	
<u>MCMBP</u>	3	1	2	
<u>MDM2</u>	3	1	2	
<u>MXD1</u>	3	2	1	
<u>PAN2</u>	3	2	1	
<u>POLG2</u>	3	1	2	
<u>RARG</u>	3	3	0	
<u>REN</u>	3	2	1	
<u>SCD5</u>	3	2	1	
<u>SLC6A4</u>	3	1	2	
<u>SP2</u>	3	2	1	
<u>SUV39H2</u>	3	1	2	
<u>TNNT1</u>	3	2	1	
<u>TPSB2</u>	3	1	2	
<u>TRIM13</u>	3	3	0	
<u>UBR7</u>	3	0	3	
<u>ZBTB43</u>	3	1	2	
<u>AASDHPPT</u>	2	0	2	
<u>ABP1</u>	2	2	0	
<u>ADH5</u>	2	0	2	
<u>AKAP9</u>	2	2	0	
<u>AMACR</u>	2	2	0	
<u>ANXA1</u>	2	0	2	
<u>ARFGEF2</u>	2	2	0	
<u>ARID1A</u>	2	2	0	
<u>ATF6</u>	2	2	0	
<u>ATMIN</u>	2	0	2	
<u>ATP9B</u>	2	2	0	
<u>BAIAP2</u>	2	2	0	

<u>BAZ2A</u>	2	2	0	
<u>BAZ2B</u>	2	2	0	
<u>BIN1</u>	2	2	0	
C1ORF183	2	0	2	
<u>CAB39</u>	2	0	2	
<u>CASP8</u>	2	0	2	
<u>CBR3</u>	2	2	0	
<u>CBX7</u>	2	0	2	
CC2D1A	2	2	0	
<u>CCND2</u>	2	2	0	
<u>CCNT1</u>	2	2	0	
<u>CCNT2</u>	2	2	0	
<u>CDK5R1</u>	2	2	0	
<u>CELP</u>	2	2	0	
<u>CEP152</u>	2	2	0	
<u>CHIC2</u>	2	2	0	
<u>CHRNE</u>	2	2	0	
<u>CLCN2</u>	2	0	2	
<u>CLDN15</u>	2	2	0	
<u>CLDN9</u>	2	2	0	
<u>CLIC3</u>	2	0	2	
<u>CREB1</u>	2	2	0	
<u>CREB3L1</u>	2	2	0	
<u>CRKL</u>	2	2	0	
<u>CSNK2A1</u>	2	2	0	
<u>CYP19A1</u>	2	2	0	
<u>DDR1</u>	2	2	0	
<u>DLX4</u>	2	2	0	
<u>DMPK</u>	2	2	0	
<u>DPYSL4</u>	2	2	0	
<u>DYSF</u>	2	2	0	
<u>EBAG9</u>	2	0	2	
<u>ECI2</u>	2	0	2	
<u>EDN1</u>	2	2	0	
<u>EDNRA</u>	2	2	0	
<u>EFNA3</u>	2	0	2	
<u>EHD1</u>	2	2	0	
<u>EHHADH</u>	2	0	2	
<u>ELAVL1</u>	2	0	2	
<u>ELK1</u>	2	2	0	
<u>ELK4</u>	2	2	0	
<u>EPHA4</u>	2	2	0	
<u>EPRS</u>	2	0	2	
<u>ERC1</u>	2	2	0	
<u>ETAA1</u>	2	0	2	
<u>EVL</u>	2	0	2	
<u>EWSR1</u>	2	2	0	
<u>FAM172A</u>	2	0	2	

<u>FDXR</u>	2	2	0	
<u>FHL2</u>	2	2	0	
<u>FOXC1</u>	2	2	0	
<u>FRMD4B</u>	2	2	0	
<u>GAL</u>	2	2	0	
<u>GATA1</u>	2	2	0	
<u>GGA3</u>	2	2	0	
<u>GMEB1</u>	2	2	0	
<u>GPX1</u>	2	2	0	
<u>GRB10</u>	2	0	2	
<u>H6PD</u>	2	2	0	
<u>HEG1</u>	2	2	0	
<u>HIC2</u>	2	2	0	
<u>HIST1H1D</u>	2	2	0	
<u>HIST1H1T</u>	2	2	0	
<u>HIST1H2AM</u>	2	2	0	
<u>HIST1H2BN</u>	2	2	0	
<u>HIST1H2BO</u>	2	2	0	
<u>HIST1H4D</u>	2	2	0	
<u>HIST1H4H</u>	2	2	0	
<u>HK2</u>	2	0	2	
<u>HMOX1</u>	2	2	0	
<u>HP</u>	2	0	2	
<u>HUS1</u>	2	2	0	
<u>IER3</u>	2	0	2	
<u>IL11</u>	2	2	0	
<u>IL12B</u>	2	2	0	
<u>IL1RN</u>	2	2	0	
<u>IRGQ</u>	2	2	0	
<u>KATNB1</u>	2	0	2	
<u>KDM4C</u>	2	2	0	
<u>KDM5B</u>	2	2	0	
<u>KIAA0753</u>	2	2	0	
<u>KIAA1324</u>	2	2	0	
<u>KIF18A</u>	2	2	0	
<u>KLK13</u>	2	2	0	
<u>KLK2</u>	2	2	0	
<u>KRT5</u>	2	0	2	
<u>LSS</u>	2	2	0	
<u>MAP3K5</u>	2	0	2	
<u>MARCH6</u>	2	2	0	
<u>MAST4</u>	2	0	2	
<u>MAU2</u>	2	2	0	
<u>MEAF6</u>	2	2	0	
<u>MKNK1</u>	2	2	0	
<u>MSX2</u>	2	2	0	
<u>NCLN</u>	2	2	0	
<u>NIPA2</u>	2	0	2	

<u>NIPBL</u>	2	2	0	
<u>NPPB</u>	2	2	0	
<u>NR2C2</u>	2	2	0	
<u>NR4A1</u>	2	2	0	
<u>NR5A1</u>	2	2	0	
<u>ODF1</u>	2	0	2	
<u>OGFR</u>	2	0	2	
<u>OGT</u>	2	2	0	
<u>OLFM1</u>	2	2	0	
<u>OPA3</u>	2	0	2	
<u>OR2B6</u>	2	2	0	
<u>OVOL1</u>	2	2	0	
<u>OVOL2</u>	2	2	0	
<u>PARD6B</u>	2	2	0	
<u>PARP2</u>	2	0	2	
<u>PER3</u>	2	0	2	
<u>PHLPP1</u>	2	2	0	
<u>PHYH</u>	2	2	0	
<u>PIK3R3</u>	2	2	0	
<u>PLAGL2</u>	2	2	0	
<u>PLEKHM1</u>	2	2	0	
<u>PLLP</u>	2	2	0	
<u>PLXNA2</u>	2	2	0	
<u>PMF1</u>	2	2	0	
<u>PRDM10</u>	2	2	0	
<u>PRL</u>	2	2	0	
<u>PROC</u>	2	2	0	
<u>PRPSAP1</u>	2	0	2	
<u>PSG9</u>	2	2	0	
<u>PSMA6</u>	2	2	0	
<u>PTMS</u>	2	2	0	
<u>PTPN21</u>	2	2	0	
<u>PWP1</u>	2	0	2	
<u>RALGAPA1</u>	2	2	0	
<u>RALGAPB</u>	2	0	2	
<u>RANBP17</u>	2	2	0	
<u>RCHY1</u>	2	2	0	
<u>RETSAT</u>	2	0	2	
<u>RHOT1</u>	2	0	2	
<u>RNF24</u>	2	2	0	
<u>RTF1</u>	2	0	2	
<u>SKIL</u>	2	2	0	
<u>SLC25A4</u>	2	2	0	
<u>SLC2A4</u>	2	2	0	
<u>SLC39A9</u>	2	2	0	
<u>SLC4A7</u>	2	2	0	
<u>SLC4A8</u>	2	0	2	
<u>SLC6A14</u>	2	2	0	

<u>SMARCD2</u>	2	0	2	
<u>SMC5</u>	2	2	0	
<u>SORBS1</u>	2	2	0	
<u>SOX15</u>	2	2	0	
<u>SPATA20</u>	2	2	0	
<u>SPR</u>	2	2	0	
<u>SPRED2</u>	2	2	0	
<u>SRRM2</u>	2	2	0	
<u>SRSF5</u>	2	2	0	
<u>SS18L1</u>	2	0	2	
<u>ST3GAL4</u>	2	2	0	
<u>STK17A</u>	2	2	0	
<u>STK3</u>	2	2	0	
<u>STRN</u>	2	2	0	
<u>SYNE2</u>	2	0	2	
<u>SYNJ2</u>	2	2	0	
<u>TBC1D1</u>	2	2	0	
<u>TCF25</u>	2	2	0	
<u>TCF3</u>	2	2	0	
<u>TFAP2A</u>	2	2	0	
<u>TFCP2L1</u>	2	0	2	
<u>TGFB2</u>	2	2	0	
<u>THBS1</u>	2	2	0	
<u>TLE4</u>	2	2	0	
<u>TMEM97</u>	2	0	2	
<u>TMF1</u>	2	2	0	
<u>TMPRSS2</u>	2	2	0	
<u>TNFAIP2</u>	2	2	0	
<u>TOMM20</u>	2	0	2	
<u>TRA2A</u>	2	2	0	
<u>TSC22D2</u>	2	2	0	
<u>TSPAN5</u>	2	0	2	
<u>UBAP2L</u>	2	2	0	
<u>UBE2C</u>	2	0	2	
<u>UBR4</u>	2	2	0	
<u>UCN</u>	2	2	0	
<u>UHRF1BP1L</u>	2	2	0	
<u>VCPIP1</u>	2	2	0	
<u>VIM</u>	2	0	2	
<u>VRK3</u>	2	2	0	
<u>WISP2</u>	2	2	0	
<u>WSB2</u>	2	0	2	
<u>WWTR1</u>	2	2	0	
<u>XIAP</u>	2	2	0	
<u>XPO4</u>	2	2	0	
<u>ZDHHC6</u>	2	0	2	
<u>ZFP30</u>	2	0	2	
<u>ZFP36L1</u>	2	2	0	

<u>ZFX</u>	2	2	0	
ZNF324	2	2	0	
ZNF335	2	2	0	
ZNF442	2	2	0	
ZNF500	2	0	2	
ZNF609	2	2	0	
ZNF682	2	2	0	
ZNF750	2	2	0	

Complex 2

mRNA based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.843	0.020	<u>TRAF5</u>	0.863	0.035	<u>SFRP1</u>
0.790	0.056	<u>TPM1</u>	0.828	0.039	<u>SOLE</u>
0.758	0.065	<u>ADORA2B</u>	0.758	0.065	<u>PFKFB2</u>
0.758	0.065	<u>CDCA4</u>	0.758	0.065	<u>SH3BGRL</u>
0.758	0.065	<u>CENPJ</u>	0.758	0.065	<u>TRIM13</u>
0.758	0.065	<u>DNAJC9</u>	0.718	0.051	<u>ST3GAL1</u>
0.758	0.065	<u>DONSON</u>	0.669	0.015	<u>COX5B</u>
0.758	0.065	<u>HAUS8</u>	0.696	0.068	<u>UGT2B15</u>
0.758	0.065	<u>MCMBP</u>	0.664	0.041	<u>CALM1</u>
0.758	0.065	<u>NUP155</u>	0.693	0.083	<u>ALDOA</u>
0.758	0.065	<u>PARP2</u>	0.673	0.067	<u>KRT6A</u>
0.758	0.065	<u>RMI1</u>	0.688	0.084	<u>CACNG4</u>
0.758	0.065	<u>SCARA3</u>	0.688	0.084	<u>CHRNE</u>
0.758	0.065	<u>SLC16A14</u>	0.650	0.055	<u>WISP2</u>
0.758	0.065	<u>SUV39H2</u>	0.688	0.109	<u>GFRA1</u>
0.739	0.065	<u>GSS</u>	0.660	0.081	<u>EXOSC4</u>
0.696	0.056	<u>NSF</u>	0.643	0.071	<u>FADS1</u>
0.674	0.063	<u>OSBP2</u>	0.619	0.058	<u>SCGB2A1</u>
0.687	0.078	<u>CAPRIN1</u>	0.616	0.064	<u>CYTH1</u>
0.674	0.082	<u>PLEC</u>	0.573	0.041	<u>PSMD6</u>
0.637	0.048	<u>ABCC5</u>	0.619	0.096	<u>KRT34</u>
0.689	0.107	<u>C9ORF40</u>	0.539	0.035	<u>NDUFB2</u>
0.597	0.039	<u>SLTM</u>	0.603	0.105	<u>GAS6</u>
0.597	0.039	<u>ZBTB43</u>	0.590	0.093	<u>PTGER4</u>
0.658	0.101	<u>RPRM</u>	0.572	0.079	<u>CHEK1</u>
0.605	0.063	<u>B4GALT5</u>	0.507	0.015	<u>RARG</u>
0.626	0.085	<u>ERCC2</u>	0.614	0.126	<u>HIVEP1</u>
0.634	0.095	<u>MFAP4</u>	0.618	0.136	<u>PPP1CB</u>
0.643	0.106	<u>CXCL2</u>	0.614	0.138	<u>C1ORF63</u>
0.617	0.087	<u>CXCR7</u>	0.537	0.063	<u>GAL</u>
0.614	0.085	<u>PPP1CA</u>	0.505	0.031	<u>UGT2B17</u>
0.591	0.065	<u>PRIMA1</u>	0.545	0.075	<u>SPATA20</u>
0.571	0.053	<u>EFNA3</u>	0.592	0.131	<u>DNAJB14</u>
0.562	0.053	<u>SRPK2</u>	0.568	0.107	<u>MT1B</u>
0.636	0.128	<u>TMSB15A</u>	0.564	0.108	<u>LINC00467</u>
0.592	0.085	<u>TNIK</u>	0.563	0.109	<u>KCNH2</u>
0.575	0.071	<u>TBL1XR1</u>	0.563	0.109	<u>PLLP</u>
0.533	0.034	<u>CAB39</u>	0.563	0.109	<u>SLC25A4</u>
0.569	0.073	<u>PGM2L1</u>	0.563	0.109	<u>ZYX</u>
0.578	0.092	<u>MYNN</u>	0.561	0.118	<u>CASP2</u>
0.567	0.086	<u>L1CAM</u>	0.503	0.074	<u>IL1RN</u>
0.536	0.057	<u>ILF2</u>	0.503	0.088	<u>PDS5B</u>
0.620	0.143	<u>HIG2</u>	0.556	0.142	<u>OLFM1</u>
0.561	0.094	<u>LGALS1</u>	0.548	0.137	<u>GATA1</u>

0.522	0.059	<u>STK39</u>	0.535	0.129	<u>MGST1</u>
0.541	0.087	<u>DIO2</u>	0.532	0.128	<u>OLFML3</u>
0.568	0.115	<u>RARB</u>	0.504	0.115	<u>HMMR</u>
0.563	0.109	<u>MAST4</u>	0.535	0.157	<u>SLC4A11</u>
0.563	0.109	<u>MSH5</u>	0.514	0.152	<u>WT1</u>
0.563	0.109	<u>TREX1</u>	0.525	0.162	<u>TFF3</u>
0.581	0.130	<u>SMARCC1</u>	0.509	0.148	<u>CREB3L1</u>
0.551	0.104	<u>RBM12</u>	0.509	0.148	<u>RNASEL</u>
0.550	0.104	<u>DSE</u>	0.525	0.169	<u>KIAA0247</u>
0.514	0.070	<u>UBE2M</u>	0.511	0.165	<u>PLK3</u>
0.538	0.094	<u>LRP6</u>	0.515	0.185	<u>GGH</u>
0.557	0.114	<u>PPIH</u>	0.515	0.185	<u>STMN1</u>
0.534	0.096	<u>POC1A</u>	0.513	0.185	<u>ABHD2</u>
0.540	0.110	<u>TANC1</u>	0.526	0.199	<u>IL10RB</u>
0.515	0.088	<u>ARNT2</u>	0.511	0.187	<u>AURKA</u>
0.541	0.116	<u>COL5A2</u>	0.524	0.212	<u>UBE2C</u>
0.616	0.191	<u>TBC1D9</u>			
0.514	0.089	<u>OSR2</u>			
0.564	0.141	<u>NPM1</u>			
0.528	0.112	<u>NDE1</u>			
0.514	0.109	<u>SCAMP1</u>			
0.572	0.171	<u>HIFX</u>			
0.526	0.130	<u>HPS5</u>			
0.536	0.150	<u>IVNS1ABP</u>			
0.531	0.149	<u>MAPK8</u>			
0.505	0.131	<u>SYMPK</u>			
0.514	0.145	<u>FKBP5</u>			
0.517	0.149	<u>ACSL3</u>			
0.506	0.144	<u>ABCA13</u>			
0.506	0.144	<u>ABCC13</u>			
0.506	0.144	<u>TMEM59L</u>			
0.548	0.198	<u>WDR4</u>			
0.530	0.207	<u>IKBKAP</u>			

Protein based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.586	0.154	<u>PPARA</u>	0.596	0.095	<u>CD83</u>
0.509	0.153	<u>VIM</u>			

MCF7 based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.793	0.021	<u>FOXMI</u>	0.833	0.013	<u>C11orf68</u>
0.792	0.068	<u>UBE2C</u>	0.810	0.029	<u>CLDN9</u>
0.731	0.023	<u>H2AFJ</u>	0.800	0.020	<u>ZNF672</u>
0.705	0.015	<u>BBS4</u>	0.796	0.037	<u>CLCF1</u>

0.682	0.038	<u>SUCO</u>	0.763	0.005	<u>STRN</u>
0.686	0.042	<u>SBF1</u>	0.767	0.015	<u>CDKN1B</u>
0.668	0.029	<u>C3orf52</u>	0.761	0.028	<u>ABCB6</u>
0.627	0.012	<u>ACVR2B</u>	0.759	0.033	<u>BIN1</u>
0.627	0.012	<u>BID</u>	0.747	0.028	<u>CBR3</u>
0.627	0.012	<u>ERGIC2</u>	0.724	0.020	<u>RANGAP1</u>
0.634	0.024	<u>MRPL34</u>	0.730	0.045	<u>KIAA0232</u>
0.618	0.038	<u>FKBPL</u>	0.723	0.040	<u>FOXC1</u>
0.617	0.038	<u>SFN</u>	0.726	0.047	<u>KIAA0430</u>
0.632	0.054	<u>KIF18B</u>	0.655	0.032	<u>RAB3A</u>
0.582	0.020	<u>LRIG1</u>	0.627	0.012	<u>ALAD</u>
0.630	0.068	<u>FZD2</u>	0.627	0.012	<u>CLEC16A</u>
0.622	0.065	<u>PLK1</u>	0.627	0.012	<u>FBXL18</u>
0.605	0.055	<u>ESPL1</u>	0.627	0.012	<u>ZC2HC1A</u>
0.575	0.033	<u>MAST4</u>	0.659	0.050	<u>GPRC5C</u>
0.559	0.025	<u>NEMF</u>	0.661	0.055	<u>WISP2</u>
0.550	0.018	<u>MREG</u>	0.615	0.011	<u>MARCH8</u>
0.570	0.043	<u>ZNF22</u>	0.615	0.011	<u>WIP1</u>
0.557	0.030	<u>FGFR2</u>	0.633	0.030	<u>TRIM23</u>
0.575	0.054	<u>OGFR</u>	0.614	0.014	<u>PHLPP1</u>
0.581	0.062	<u>NREP</u>	0.617	0.020	<u>PIK3IP1</u>
0.564	0.046	<u>METTL21B</u>	0.624	0.031	<u>LYPD3</u>
0.554	0.040	<u>FAM111A</u>	0.701	0.126	<u>PTMS</u>
0.540	0.026	<u>SMCO4</u>	0.585	0.013	<u>MTUS1</u>
0.553	0.042	<u>TNS3</u>	0.584	0.012	<u>ANGEL2</u>
0.592	0.082	<u>ZNF85</u>	0.588	0.017	<u>ANKZF1</u>
0.595	0.087	<u>DEK</u>	0.598	0.029	<u>SCAND2P</u>
0.565	0.059	<u>PCBP1</u>	0.613	0.050	<u>RAB40B</u>
0.534	0.029	<u>HGSNAT</u>	0.593	0.034	<u>GCLC</u>
0.551	0.049	<u>CGGBP1</u>	0.585	0.027	<u>ZNF200</u>
0.566	0.068	<u>NFE2L3</u>	0.601	0.044	<u>STX3</u>
0.578	0.080	<u>ARL4C</u>	0.641	0.093	<u>CHD3</u>
0.560	0.063	<u>FLJ10038</u>	0.585	0.038	<u>CLIP1</u>
0.518	0.021	<u>GMCL1</u>	0.566	0.020	<u>ATXN7</u>
0.544	0.048	<u>ALOX12P2</u>	0.572	0.026	<u>SORBS1</u>
0.574	0.082	<u>TNNT1</u>	0.579	0.041	<u>FBXL5</u>
0.568	0.076	<u>PANK2</u>	0.546	0.017	<u>CDS2</u>
0.546	0.057	<u>CDKN2C</u>	0.593	0.067	<u>SLC4A7</u>
0.562	0.075	<u>HMMR</u>	0.555	0.029	<u>NPL</u>
0.530	0.044	<u>SPDL1</u>	0.563	0.042	<u>MINOS1P1</u>
0.533	0.049	<u>FAM172A</u>	0.577	0.056	<u>ZNF222</u>
0.526	0.042	<u>APIAR</u>	0.616	0.098	<u>BTG2</u>
0.548	0.065	<u>KCNG1</u>	0.550	0.033	<u>FBXO5</u>
0.530	0.049	<u>ASUN</u>	0.533	0.018	<u>SPR</u>
0.520	0.040	<u>HEATR6</u>	0.530	0.017	<u>PPP3CC</u>
0.529	0.052	<u>THAP4</u>	0.545	0.032	<u>PRNP</u>
0.514	0.038	<u>MTSS1</u>	0.560	0.048	<u>TFE3</u>

0.512	0.037	<u>NINL</u>	0.572	0.062	<u>PIGA</u>
0.521	0.050	<u>BCL2</u>	0.574	0.067	<u>INTS6</u>
0.550	0.079	<u>STC2</u>	0.560	0.053	<u>GABARAPL1</u>
0.520	0.051	<u>DBP</u>	0.534	0.032	<u>LINC00963</u>
0.530	0.062	<u>MMACHC</u>	0.559	0.057	<u>VAMP2</u>
0.520	0.052	<u>URB2</u>	0.551	0.049	<u>SRGAP3</u>
0.512	0.046	<u>CD3EAP</u>	0.546	0.046	<u>ZFAND5</u>
0.509	0.045	<u>ACOX3</u>	0.549	0.050	<u>NIPBL</u>
0.557	0.093	<u>CYP26A1</u>	0.592	0.093	<u>IFIT2</u>
0.514	0.050	<u>THG1L</u>	0.593	0.097	<u>ZFP36L1</u>
0.511	0.049	<u>NAT1</u>	0.529	0.034	<u>PPP3R1</u>
0.546	0.085	<u>MARCH8</u>	0.522	0.028	<u>LSM14A</u>
0.530	0.070	<u>MAGEF1</u>	0.537	0.045	<u>STK17A</u>
0.511	0.055	<u>RIBC2</u>	0.582	0.095	<u>PGM1</u>
0.502	0.046	<u>FAM134A</u>	0.549	0.062	<u>DNAJB2</u>
0.545	0.091	<u>RERE</u>	0.540	0.057	<u>PROCR</u>
0.512	0.060	<u>ARMCX1</u>	0.517	0.034	<u>COQ10B</u>
0.503	0.051	<u>MYD88</u>	0.539	0.057	<u>SCYL3</u>
0.520	0.069	<u>KIAA0125</u>	0.526	0.044	<u>OSR2</u>
0.502	0.051	<u>TRAF3IP2</u>	0.581	0.102	<u>CC2D1A</u>
0.512	0.062	<u>JADE2</u>	0.523	0.045	<u>TCEB3-AS1</u>
0.503	0.053	<u>DBF4</u>	0.513	0.035	<u>MTMR9</u>
0.505	0.056	<u>HSPBAP1</u>	0.508	0.032	<u>KDM6A</u>
0.515	0.069	<u>FUT4</u>	0.518	0.044	<u>ZNF654</u>
0.510	0.067	<u>PDZK1</u>	0.535	0.061	<u>SPAG9</u>
0.507	0.066	<u>UMPS</u>	0.537	0.064	<u>HEG1</u>
0.523	0.082	<u>PSMD12</u>	0.502	0.029	<u>ZHX2</u>
0.529	0.088	<u>PRRC1</u>	0.502	0.029	<u>PTPN21</u>
0.530	0.093	<u>ZC3HAV1</u>	0.549	0.077	<u>ZNF217</u>
0.533	0.103	<u>PUS3</u>	0.508	0.038	<u>SAMD4A</u>
0.562	0.134	<u>GTSE1</u>	0.539	0.069	<u>ATG12</u>
0.512	0.085	<u>ZC3H13</u>	0.507	0.041	<u>HIST1H4H</u>
0.503	0.078	<u>ARHGEF3</u>	0.517	0.054	<u>PSG9</u>
0.547	0.123	<u>PTPN18</u>	0.521	0.058	<u>DIP2C</u>
0.518	0.096	<u>SIDT1</u>	0.569	0.109	<u>BNIP3L</u>
0.561	0.140	<u>SFSWAP</u>	0.509	0.051	<u>MAP3K14</u>
0.524	0.104	<u>SEC22A</u>	0.508	0.051	<u>RGS17</u>
0.507	0.091	<u>TCAF1</u>	0.529	0.072	<u>HIST2H2BE</u>
0.514	0.099	<u>USP46</u>	0.510	0.055	<u>WDR47</u>
0.523	0.111	<u>MYBL1</u>	0.516	0.064	<u>ZNF211</u>
0.504	0.096	<u>PIK3R1</u>	0.534	0.082	<u>ID3</u>
0.527	0.120	<u>AURKA</u>	0.512	0.062	<u>TNFAIP2</u>
0.510	0.110	<u>CHAF1A</u>	0.511	0.063	<u>NR4A1</u>
0.514	0.121	<u>TGS1</u>	0.539	0.092	<u>CSRP2</u>
0.560	0.169	<u>C2CD2</u>	0.511	0.064	<u>LDLR</u>
0.503	0.116	<u>ADRA2C</u>	0.543	0.097	<u>KCTD5</u>
0.511	0.125	<u>CPTP</u>	0.519	0.073	<u>NCLN</u>

0.541	0.155	<u>FAM208B</u>	0.502	0.057	<u>EFNA1</u>
0.511	0.172	<u>RNF4</u>	0.519	0.076	<u>ADM</u>
			0.526	0.083	<u>HMOX1</u>
			0.534	0.098	<u>SNHG17</u>
			0.502	0.067	<u>MCL1</u>
			0.548	0.120	<u>FOSL1</u>
			0.526	0.099	<u>NKX3-1</u>
			0.584	0.158	<u>KLF2</u>
			0.515	0.091	<u>PBXIP1</u>
			0.513	0.096	<u>NFKBIB</u>
			0.542	0.128	<u>DUSP1</u>
			0.577	0.163	<u>MSRB2</u>
			0.533	0.121	<u>KLF10</u>
			0.505	0.094	<u>ELF3</u>
			0.522	0.115	<u>IER5</u>
			0.547	0.144	<u>PLA2G3</u>
			0.502	0.100	<u>MSANTD2</u>
			0.523	0.122	<u>IFIT5</u>
			0.502	0.109	<u>BHLHE40</u>

VCAP_6h based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.855	0.024	<u>ZNF221</u>	0.841	0.030	<u>SCMH1</u>
0.819	0.044	<u>CACNA1B</u>	0.816	0.048	<u>SLC38A2</u>
0.801	0.048	<u>SLC12A6</u>	0.813	0.052	<u>AKIP1</u>
0.792	0.052	<u>KCNC2</u>	0.758	0.040	<u>MIS12</u>
0.778	0.051	<u>NPLOC4</u>	0.781	0.084	<u>BCS1L</u>
0.769	0.046	<u>DYNC1H1</u>	0.750	0.062	<u>SP3</u>
0.770	0.057	<u>BACH2</u>	0.789	0.104	<u>SMG5</u>
0.723	0.017	<u>HP</u>	0.742	0.065	<u>KPNA2</u>
0.767	0.069	<u>C10ORF68</u>	0.749	0.083	<u>SNRPB2</u>
0.749	0.060	<u>CPM</u>	0.745	0.080	<u>MRPL4</u>
0.770	0.086	<u>LRRC8E</u>	0.702	0.048	<u>UNC50</u>
0.762	0.081	<u>ADM</u>	0.730	0.081	<u>ZDHHC4</u>
0.724	0.055	<u>PCYOX1</u>	0.723	0.080	<u>WDR74</u>
0.734	0.066	<u>CXORF56</u>	0.672	0.030	<u>CBR3</u>
0.722	0.057	<u>KANK2</u>	0.737	0.099	<u>TIMM9</u>
0.715	0.052	<u>HIBCH</u>	0.730	0.094	<u>HGSNAT</u>
0.746	0.091	<u>ASTN1</u>	0.716	0.087	<u>SNX17</u>
0.736	0.081	<u>LASP1</u>	0.701	0.074	<u>PALLD</u>
0.750	0.096	<u>CLDN7</u>	0.687	0.065	<u>ISOC1</u>
0.737	0.085	<u>ZNF23</u>	0.699	0.082	<u>RAB9A</u>
0.686	0.034	<u>CENPC1</u>	0.674	0.065	<u>MRPL48</u>
0.749	0.098	<u>MGC12488</u>	0.677	0.069	<u>PCTP</u>
0.729	0.080	<u>KIAA0664L3</u>	0.686	0.085	<u>ACVR2A</u>

0.734	0.087	<u>CLCN2</u>	0.685	0.086	<u>FUBP3</u>
0.743	0.099	<u>SPIN1</u>	0.690	0.093	<u>NDUFS3</u>
0.698	0.060	<u>SNIP1</u>	0.688	0.096	<u>CTSK</u>
0.704	0.073	<u>GTF2H2B</u>	0.675	0.087	<u>PDCD10</u>
0.670	0.042	<u>C20ORF46</u>	0.679	0.091	<u>CTCF</u>
0.711	0.092	<u>SLC6A4</u>	0.691	0.118	<u>BABAM1</u>
0.700	0.091	<u>DSC3</u>	0.648	0.075	<u>TXN2</u>
0.660	0.052	<u>ROBO4</u>	0.637	0.065	<u>DNAJC7</u>
0.690	0.083	<u>OASL</u>	0.637	0.066	<u>FAM59A</u>
0.662	0.055	<u>GABRA2</u>	0.642	0.071	<u>BFAR</u>
0.672	0.070	<u>PRR5L</u>	0.632	0.067	<u>ZNF580</u>
0.697	0.101	<u>ACSL4</u>	0.633	0.069	<u>NCAPD3</u>
0.702	0.106	<u>TMOD3</u>	0.637	0.074	<u>POLE3</u>
0.683	0.088	<u>LOC646934</u>	0.671	0.109	<u>RAD23A</u>
0.678	0.086	<u>CXXC1</u>	0.697	0.138	<u>CAD</u>
0.690	0.098	<u>ST8SIA1</u>	0.637	0.079	<u>TACC2</u>
0.657	0.066	<u>HSPB2</u>	0.637	0.084	<u>MFAP1</u>
0.744	0.156	<u>DCAF17</u>	0.628	0.075	<u>NSMCE4A</u>
0.676	0.091	<u>PCP4</u>	0.635	0.082	<u>DHX32</u>
0.681	0.096	<u>TSPYL4</u>	0.613	0.061	<u>TOR3A</u>
0.645	0.060	<u>KAZALD1</u>	0.658	0.106	<u>MDK</u>
0.710	0.125	<u>PFN2</u>	0.702	0.153	<u>MCAT</u>
0.667	0.084	<u>C3</u>	0.626	0.078	<u>MRPL24</u>
0.657	0.075	<u>ABCC5</u>	0.647	0.101	<u>FANCG</u>
0.689	0.107	<u>KLKB1</u>	0.642	0.097	<u>PCID2</u>
0.656	0.076	<u>FXC1</u>	0.653	0.117	<u>MMP7</u>
0.671	0.092	<u>FAM46C</u>	0.657	0.122	<u>TGDS</u>
0.633	0.055	<u>HIST1H1D</u>	0.647	0.115	<u>KIAA1324</u>
0.671	0.096	<u>MGLL</u>	0.602	0.074	<u>HDHD1</u>
0.686	0.112	<u>MAGEA11</u>	0.663	0.136	<u>PRMT1</u>
0.658	0.085	<u>MYOC</u>	0.656	0.131	<u>HNRNPA0</u>
0.708	0.135	<u>COL6A3</u>	0.620	0.096	<u>TDRD7</u>
0.670	0.098	<u>GFRA2</u>	0.633	0.111	<u>GPATCH2</u>
0.658	0.087	<u>LHPP</u>	0.601	0.081	<u>SCO2</u>
0.642	0.074	<u>SERPINI1</u>	0.648	0.128	<u>MRPL35</u>
0.633	0.067	<u>HIVEP3</u>	0.581	0.063	<u>CNNM4</u>
0.625	0.060	<u>LIPC</u>	0.606	0.090	<u>GUCY1A3</u>
0.689	0.124	<u>FRG1</u>	0.649	0.134	<u>PSMD7</u>
0.657	0.092	<u>ABCA12</u>	0.543	0.028	<u>ABCF3</u>
0.604	0.040	<u>SH3BP1</u>	0.599	0.085	<u>PTPN9</u>
0.638	0.074	<u>COMMD3</u>	0.613	0.100	<u>ALAS1</u>
0.645	0.082	<u>ADH7</u>	0.633	0.123	<u>TMEM123</u>
0.672	0.111	<u>TGM3</u>	0.569	0.064	<u>LIMA1</u>
0.627	0.070	<u>UPF2</u>	0.610	0.109	<u>RAP1B</u>
0.623	0.069	<u>TLR2</u>	0.611	0.112	<u>STRN4</u>
0.620	0.067	<u>TPP1</u>	0.654	0.156	<u>SSRP1</u>
0.656	0.103	<u>C1ORF114</u>	0.618	0.119	<u>TMEM93</u>

0.623	0.071	<u>KIAA0485</u>	0.584	0.087	<u>NTHL1</u>
0.631	0.080	<u>EPHB2</u>	0.612	0.116	<u>RSAD2</u>
0.621	0.070	<u>TCOF1</u>	0.592	0.097	<u>IRX4</u>
0.665	0.118	<u>CETP</u>	0.598	0.103	<u>TIMM44</u>
0.654	0.108	<u>TMEM30B</u>	0.653	0.159	<u>ETFA</u>
0.605	0.060	<u>CEACAM8</u>	0.587	0.093	<u>UOCRFS1</u>
0.694	0.153	<u>EBF2</u>	0.565	0.071	<u>DHCR24</u>
0.665	0.124	<u>SELL</u>	0.549	0.056	<u>DLD</u>
0.627	0.088	<u>STX7</u>	0.635	0.143	<u>C1ORF216</u>
0.655	0.116	<u>APOBEC3G</u>	0.584	0.094	<u>COQ9</u>
0.656	0.118	<u>ECHDC3</u>	0.568	0.079	<u>TMSB15A</u>
0.674	0.136	<u>APOBEC3C</u>	0.599	0.113	<u>CENPA</u>
0.631	0.094	<u>ICAM4</u>	0.618	0.133	<u>PODXL2</u>
0.614	0.077	<u>ULBP2</u>	0.600	0.118	<u>FJX1</u>
0.632	0.097	<u>KPNA5</u>	0.569	0.089	<u>LAP3</u>
0.663	0.129	<u>LRRC6</u>	0.631	0.152	<u>USP21</u>
0.612	0.078	<u>DNMT3B</u>	0.573	0.095	<u>MX1</u>
0.598	0.065	<u>DDX43</u>	0.577	0.100	<u>AUH</u>
0.637	0.105	<u>INSL4</u>	0.567	0.091	<u>SH3GLB2</u>
0.630	0.097	<u>KRT5</u>	0.571	0.095	<u>CEP70</u>
0.614	0.082	<u>TLR8</u>	0.559	0.084	<u>RHBDF1</u>
0.615	0.084	<u>CGREF1</u>	0.588	0.115	<u>GREM1</u>
0.601	0.075	<u>WNT11</u>	0.614	0.142	<u>NCAPH</u>
0.640	0.116	<u>KIF13B</u>	0.570	0.100	<u>GBAS</u>
0.596	0.075	<u>RPL11</u>	0.588	0.119	<u>DPYSL2</u>
0.608	0.087	<u>RDH16</u>	0.596	0.127	<u>TAF11</u>
0.624	0.104	<u>ATAT1</u>	0.545	0.076	<u>ASS1</u>
0.588	0.071	<u>LTBP2</u>	0.548	0.080	<u>RAD21</u>
0.581	0.066	<u>BAGE</u>	0.606	0.139	<u>CCT5</u>
0.615	0.102	<u>GABRB3</u>	0.558	0.093	<u>FCER1A</u>
0.622	0.108	<u>BMPR2</u>	0.589	0.125	<u>G6PD</u>
0.587	0.073	<u>APOM</u>	0.521	0.058	<u>IQGAP1</u>
0.586	0.073	<u>LRIG1</u>	0.554	0.093	<u>OIP5</u>
0.619	0.109	<u>LHX2</u>	0.565	0.107	<u>RAB4A</u>
0.652	0.142	<u>FAM168A</u>	0.569	0.111	<u>TNFAIP8</u>
0.601	0.092	<u>IQGAP2</u>	0.589	0.131	<u>FBXL6</u>
0.659	0.150	<u>SERPINB7</u>	0.549	0.092	<u>XAF1</u>
0.658	0.150	<u>AZU1</u>	0.589	0.132	<u>ZNF12</u>
0.622	0.116	<u>ATP1B3</u>	0.549	0.093	<u>SCFD1</u>
0.602	0.097	<u>HYAL3</u>	0.539	0.083	<u>ADCY7</u>
0.609	0.103	<u>MEG3</u>	0.582	0.126	<u>DERL1</u>
0.637	0.133	<u>SYNPO</u>	0.560	0.105	<u>UBE2Q1</u>
0.577	0.072	<u>DUSP2</u>	0.542	0.087	<u>LSR</u>
0.587	0.083	<u>UNC93B1</u>	0.597	0.144	<u>UBXN8</u>
0.639	0.135	<u>C4ORF29</u>	0.572	0.120	<u>FASTKD1</u>
0.618	0.115	<u>ODF1</u>	0.557	0.107	<u>FAM193B</u>
0.653	0.151	<u>LAMA5</u>	0.529	0.081	<u>OAS3</u>

0.605	0.103	<u>SLIT2</u>	0.546	0.100	<u>PTPRE</u>
0.599	0.097	<u>ZXDC</u>	0.543	0.096	<u>HSD17B6</u>
0.581	0.081	<u>FZD8</u>	0.596	0.151	<u>ILF2</u>
0.590	0.091	<u>PER2</u>	0.556	0.112	<u>RABGGTA</u>
0.606	0.107	<u>DDX6</u>	0.563	0.120	<u>RDBP</u>
0.591	0.091	<u>CTSL2</u>	0.616	0.174	<u>ECSIT</u>
0.620	0.121	<u>UTY</u>	0.536	0.094	<u>CLP1</u>
0.612	0.113	<u>POLQ</u>	0.530	0.089	<u>PIK3CA</u>
0.630	0.131	<u>CORO1C</u>	0.581	0.140	<u>KIAA0101</u>
0.588	0.091	<u>SLPI</u>	0.570	0.130	<u>GATAD2A</u>
0.645	0.147	<u>PTH1R</u>	0.543	0.104	<u>TGFB1</u>
0.576	0.079	<u>USP14</u>	0.579	0.141	<u>TIMM13</u>
0.577	0.082	<u>TWF2</u>	0.569	0.132	<u>MTMR2</u>
0.646	0.151	<u>CRYGD</u>	0.533	0.096	<u>GRB7</u>
0.569	0.074	<u>WIPF2</u>	0.540	0.104	<u>HNRNPC</u>
0.683	0.188	<u>SERPIND1</u>	0.536	0.102	<u>IL10RB</u>
0.565	0.071	<u>POLR3D</u>	0.541	0.107	<u>IFI44L</u>
0.610	0.115	<u>ATP5J</u>	0.531	0.098	<u>VPS37C</u>
0.575	0.082	<u>TFCP2L1</u>	0.510	0.077	<u>PUF60</u>
0.577	0.085	<u>FMNL1</u>	0.578	0.146	<u>GALNS</u>
0.571	0.079	<u>PLTP</u>	0.575	0.143	<u>MRPL16</u>
0.565	0.073	<u>DUX1</u>	0.569	0.138	<u>BET1</u>
0.611	0.120	<u>PURA</u>	0.503	0.075	<u>ATP11B</u>
0.589	0.098	<u>LEF1</u>	0.597	0.172	<u>PTGES2</u>
0.598	0.108	<u>FAH</u>	0.531	0.107	<u>SERPINH1</u>
0.604	0.113	<u>OXT</u>	0.525	0.102	<u>IFIT3</u>
0.633	0.143	<u>C11ORF16</u>	0.522	0.101	<u>STAG2</u>
0.590	0.100	<u>MIS18BP1</u>	0.533	0.114	<u>IFIT1</u>
0.579	0.090	<u>PLA2G2D</u>	0.554	0.136	<u>ARPP21</u>
0.568	0.079	<u>KIAA0754</u>	0.540	0.123	<u>MTCP1NB</u>
0.607	0.118	<u>SSR3</u>	0.544	0.127	<u>KIAA1598</u>
0.546	0.058	<u>PSG7</u>	0.516	0.099	<u>TBPL1</u>
0.570	0.082	<u>KDSR</u>	0.553	0.137	<u>RAB32</u>
0.572	0.085	<u>NKX2-2</u>	0.514	0.101	<u>NUSAP1</u>
0.583	0.095	<u>ZNF711</u>	0.540	0.126	<u>GPD1L</u>
0.597	0.110	<u>CYBRD1</u>	0.546	0.132	<u>SLC29A3</u>
0.600	0.113	<u>EIF4H</u>	0.553	0.140	<u>ADAR</u>
0.595	0.109	<u>PKNOX1</u>	0.517	0.107	<u>POLE2</u>
0.634	0.148	<u>MRPL24</u>	0.537	0.129	<u>C1QTNF1</u>
0.559	0.074	<u>RAB11FIP1</u>	0.574	0.167	<u>PRC1</u>
0.609	0.125	<u>CPEB3</u>	0.521	0.115	<u>XKR8</u>
0.540	0.056	<u>FPGS</u>	0.532	0.127	<u>FAM110B</u>
0.565	0.081	<u>SLC13A2</u>	0.549	0.145	<u>ANXA2</u>
0.566	0.084	<u>PEX13</u>	0.578	0.174	<u>NQO2</u>
0.605	0.123	<u>FYB</u>	0.553	0.150	<u>AKR7A3</u>
0.567	0.086	<u>ZNF473</u>	0.524	0.121	<u>DIEXF</u>
0.548	0.068	<u>KLRC3</u>	0.530	0.127	<u>NDUFB3</u>

0.551	0.071	<u>CD244</u>	0.551	0.148	<u>TRAPPC2L</u>
0.596	0.117	<u>PFKP</u>	0.587	0.187	<u>UNG</u>
0.584	0.105	<u>MBD5</u>	0.531	0.132	<u>FAAH</u>
0.552	0.074	<u>MPV17</u>	0.502	0.103	<u>PTPRC</u>
0.598	0.119	<u>ERLIN2</u>	0.520	0.123	<u>FAM127B</u>
0.600	0.122	<u>HCP5</u>	0.532	0.135	<u>TRIP4</u>
0.601	0.124	<u>NUBP1</u>	0.512	0.118	<u>LAMTOR2</u>
0.637	0.162	<u>HOOK1</u>	0.535	0.142	<u>COPZ1</u>
0.587	0.112	<u>MALL</u>	0.530	0.138	<u>DDX54</u>
0.560	0.086	<u>HLA-DMB</u>	0.512	0.122	<u>MCM6</u>
0.637	0.163	<u>ZNF556</u>	0.517	0.130	<u>TPM4</u>
0.594	0.121	<u>PAQR6</u>	0.549	0.164	<u>YARS2</u>
0.580	0.106	<u>PDK4</u>	0.512	0.128	<u>GTF3C1</u>
0.617	0.144	<u>RAMP3</u>	0.563	0.180	<u>GABRP</u>
0.595	0.122	<u>LGSN</u>	0.528	0.146	<u>CLEC4A</u>
0.568	0.095	<u>SLC26A6</u>	0.542	0.162	<u>GMEB2</u>
0.597	0.125	<u>STOM</u>	0.524	0.144	<u>SLCO4A1</u>
0.535	0.063	<u>SERPINC1</u>	0.519	0.140	<u>MSH2</u>
0.611	0.140	<u>CD247</u>	0.529	0.149	<u>CLK3</u>
0.511	0.039	<u>FOXN2</u>	0.541	0.162	<u>DCTPP1</u>
0.598	0.128	<u>P2RY13</u>	0.519	0.140	<u>UQCRC2</u>
0.591	0.121	<u>VAV3</u>	0.521	0.142	<u>SPDEF</u>
0.606	0.137	<u>KCNK15</u>	0.505	0.127	<u>PEX2</u>
0.554	0.085	<u>CRTAM</u>	0.513	0.136	<u>TMED9</u>
0.554	0.085	<u>PER3</u>	0.556	0.179	<u>SPECC1L</u>
0.552	0.085	<u>B2M</u>	0.509	0.133	<u>PSMA6</u>
0.586	0.120	<u>ASH2L</u>	0.533	0.158	<u>BLOC1S1</u>
0.552	0.087	<u>INPP5B</u>	0.527	0.152	<u>TSR1</u>
0.547	0.082	<u>NOP56</u>	0.523	0.149	<u>ARHGEF5</u>
0.538	0.074	<u>LPA</u>	0.515	0.140	<u>UBE2D3</u>
0.535	0.072	<u>GLI3</u>	0.504	0.131	<u>TEAD4</u>
0.612	0.149	<u>CCL18</u>	0.507	0.135	<u>NIF3L1</u>
0.612	0.149	<u>FNDC3B</u>	0.532	0.160	<u>VASP</u>
0.577	0.115	<u>FIP1L1</u>	0.524	0.156	<u>RAP2C</u>
0.583	0.121	LOC399904	0.527	0.162	<u>POLD2</u>
0.586	0.124	<u>ASAP3</u>	0.553	0.191	<u>TIMM10</u>
0.602	0.141	<u>CCR6</u>	0.506	0.146	<u>CCDC51</u>
0.560	0.100	<u>LRMP</u>	0.554	0.195	<u>C19ORF60</u>
0.582	0.123	LOC220594	0.509	0.150	<u>IFI6</u>
0.550	0.091	<u>TEAD1</u>	0.531	0.172	<u>LRRC47</u>
0.613	0.155	<u>KCNS3</u>	0.519	0.161	<u>NKRF</u>
0.551	0.095	<u>MLF1</u>	0.501	0.149	<u>TM4SF1</u>
0.510	0.054	<u>CYP4F2</u>	0.523	0.171	<u>CNOT6</u>
0.562	0.106	<u>RPS3</u>	0.520	0.168	<u>INTS7</u>
0.543	0.088	<u>MXD1</u>	0.503	0.152	<u>BBS4</u>
0.546	0.090	<u>PGM1</u>	0.537	0.188	<u>SDHAP1</u>
0.553	0.098	<u>CTSW</u>	0.528	0.179	<u>TNFRSF1A</u>

0.563	0.108	ZNF552	0.535	0.186	AKR1A1
0.546	0.091	NAV2	0.530	0.184	HDGF
0.579	0.126	SCYL2	0.501	0.157	WAC
0.566	0.114	REPS2	0.519	0.175	PRPSAP2
0.568	0.116	TBCC	0.539	0.197	PLEKHM2
0.553	0.101	PAK3	0.536	0.196	CHI3L2
0.613	0.162	HHAT	0.530	0.190	MMD
0.589	0.138	WDR52	0.525	0.187	CCDC109B
0.566	0.116	NADSYN1	0.506	0.168	AES
0.552	0.102	GABPA	0.508	0.172	ZFP36L2
0.568	0.118	TLK1	0.502	0.168	CERS6
0.529	0.081	AFF4	0.512	0.184	DAD1
0.516	0.068	ZNF835	0.516	0.190	SUMO2
0.579	0.131	COL7A1	0.520	0.197	OLA1
0.568	0.120	HBQ1	0.505	0.187	MCM7
0.549	0.102	CALU	0.517	0.206	RWDD2A
0.560	0.113	ZNF516	0.519	0.209	CYC1
0.589	0.142	ZMYM5	0.504	0.196	DOCK1
0.573	0.126	MUC16	0.508	0.201	MOSCI
0.509	0.063	NRG2			
0.577	0.131	KRT3			
0.578	0.133	HAND1			
0.576	0.131	LOC100127972			
0.585	0.140	TMEM140			
0.535	0.090	SNAPC1			
0.516	0.072	CRYGC			
0.599	0.156	MAGEA6			
0.578	0.136	TMEM50B			
0.502	0.061	CLIC3			
0.516	0.075	FRK			
0.560	0.119	PAAF1			
0.520	0.079	SNORA21			
0.573	0.133	MSN			
0.549	0.109	PPWD1			
0.558	0.117	ALS2CL			
0.595	0.155	ALAS2			
0.553	0.113	RPS25			
0.545	0.105	KIAA1109			
0.551	0.112	BAMBI			
0.544	0.104	GALNT11			
0.521	0.082	TPI1			
0.586	0.148	PNPLA2			
0.512	0.073	DHX38			
0.603	0.165	NME4			
0.625	0.188	KIAA1024			
0.569	0.132	MCC			
0.590	0.153	SNTA1			

0.607	0.170	<u>ACSM3</u>
0.526	0.090	<u>PPFIA1</u>
0.598	0.163	ZNF253
0.539	0.104	<u>PARL</u>
0.539	0.105	<u>GPIBB</u>
0.556	0.122	<u>A4GALT</u>
0.579	0.146	<u>CCR10</u>
0.515	0.083	<u>SNRPD2</u>
0.588	0.156	C14ORF135
0.607	0.175	CLSTN2
0.564	0.132	FCN3
0.540	0.108	<u>AATF</u>
0.551	0.119	<u>CFD</u>
0.548	0.116	<u>CLDN4</u>
0.571	0.139	<u>ELAVL2</u>
0.549	0.118	<u>GOLGA3</u>
0.562	0.131	<u>PIGT</u>
0.579	0.149	IZUMO4
0.516	0.086	<u>RFC4</u>
0.543	0.113	<u>S1PR1</u>
0.554	0.125	TMEM8A
0.541	0.112	<u>OSMR</u>
0.546	0.117	<u>DNM1</u>
0.514	0.086	<u>FOLR2</u>
0.537	0.109	<u>GPR88</u>
0.502	0.075	<u>POLG2</u>
0.549	0.123	<u>YTHDC1</u>
0.532	0.106	<u>RPL27</u>
0.568	0.143	<u>ATAD3A</u>
0.523	0.099	<u>IER3IP1</u>
0.557	0.134	<u>USP47</u>
0.559	0.136	<u>TMEM214</u>
0.538	0.115	<u>MED23</u>
0.506	0.083	ZMAT3
0.600	0.177	<u>CCL21</u>
0.516	0.094	<u>DNM3</u>
0.535	0.113	GVINP1
0.554	0.132	<u>TPBG</u>
0.546	0.124	<u>HTR3A</u>
0.502	0.080	<u>DHRS2</u>
0.548	0.128	<u>ITGA10</u>
0.515	0.095	<u>TAF4B</u>
0.546	0.126	<u>TM7SF2</u>
0.550	0.133	<u>HIST1H4D</u>
0.513	0.097	<u>ONECUT2</u>
0.519	0.103	<u>NTN3</u>
0.507	0.091	<u>MAST4</u>

0.519	0.105	<u>KRT8P12</u>
0.585	0.170	<u>KIAA0513</u>
0.548	0.134	<u>EPYC</u>
0.539	0.126	<u>TFF1</u>
0.542	0.129	<u>SHOC2</u>
0.589	0.176	<u>ART3</u>
0.510	0.098	<u>ARPC1A</u>
0.530	0.119	ZNF136
0.536	0.125	<u>OXA1L</u>
0.558	0.147	<u>NACAP1</u>
0.563	0.152	<u>TPPP</u>
0.550	0.140	<u>MYOG</u>
0.573	0.163	<u>INS</u>
0.514	0.104	<u>SON</u>
0.561	0.152	<u>RAB11FIP5</u>
0.502	0.093	<u>ARMC6</u>
0.511	0.102	<u>PIP</u>
0.566	0.157	<u>NPTX1</u>
0.559	0.151	<u>PROX1</u>
0.519	0.111	<u>ACSL1</u>
0.522	0.114	<u>STATH</u>
0.547	0.141	<u>SATB2</u>
0.534	0.129	<u>ENPP1</u>
0.514	0.109	<u>HIST1H4B</u>
0.555	0.150	<u>MYLK3</u>
0.579	0.175	<u>C2ORF49</u>
0.521	0.118	<u>AASS</u>
0.539	0.136	<u>RPL6</u>
0.554	0.150	<u>F9</u>
0.546	0.144	SUZ12P
0.525	0.124	<u>URGCP</u>
0.581	0.180	<u>SUSD4</u>
0.536	0.136	<u>SMTN</u>
0.527	0.127	C7ORF44
0.559	0.160	<u>MAT1A</u>
0.547	0.148	<u>LINC00312</u>
0.538	0.139	<u>PPAT</u>
0.578	0.180	KCTD7
0.509	0.111	<u>RPL3</u>
0.571	0.173	<u>GSTCD</u>
0.534	0.136	<u>NR4A1</u>
0.574	0.177	<u>STAT5B</u>
0.565	0.169	<u>HOXB5</u>
0.545	0.148	<u>RUSC2</u>
0.503	0.107	<u>ASAP1-IT1</u>
0.522	0.126	<u>STMN1</u>
0.523	0.127	<u>ACAP2</u>

0.547	0.151	<u>DDHD2</u>
0.519	0.126	<u>LSAMP</u>
0.542	0.149	<u>COL2A1</u>
0.504	0.112	<u>EMX2</u>
0.555	0.163	<u>PFKFB4</u>
0.517	0.125	<u>CEP76</u>
0.548	0.156	<u>RNF25</u>
0.506	0.115	<u>GPKOW</u>
0.510	0.119	<u>LSM3</u>
0.513	0.123	<u>MAGED1</u>
0.564	0.176	<u>MST4</u>
0.543	0.155	<u>HLA-DOB</u>
0.512	0.125	<u>PCDHA3</u>
0.539	0.151	<u>EPM2AIP1</u>
0.505	0.117	<u>SPP1</u>
0.551	0.164	<u>BBC3</u>
0.519	0.132	<u>FICD</u>
0.558	0.171	<u>TRAV8-3</u>
0.523	0.136	<u>SP140</u>
0.531	0.144	<u>SSH1</u>
0.530	0.144	<u>EHD1</u>
0.531	0.145	<u>TPST1</u>
0.535	0.150	<u>ITIH2</u>
0.511	0.128	<u>ITK</u>
0.522	0.139	<u>GORASP1</u>
0.528	0.146	<u>ABCA3</u>
0.513	0.131	<u>TSPYL1</u>
0.545	0.165	<u>HIST1H2AJ</u>
0.518	0.138	<u>DERL2</u>
0.501	0.121	<u>RPL34</u>
0.519	0.140	<u>SNRNP200</u>
0.561	0.183	<u>SCAF8</u>
0.527	0.149	<u>SSTR3</u>
0.543	0.165	<u>TNFRSF13B</u>
0.514	0.136	<u>POLD2</u>
0.551	0.173	<u>DIO1</u>
0.524	0.148	<u>CLK2</u>
0.520	0.144	<u>WRB</u>
0.563	0.187	<u>AMN</u>
0.520	0.144	<u>NFYA</u>
0.511	0.136	<u>SSFA2</u>
0.537	0.164	<u>PIK3CG</u>
0.533	0.160	<u>TBKBP1</u>
0.525	0.152	<u>B4GALNT1</u>
0.501	0.128	<u>APOBEC3F</u>
0.508	0.136	<u>NDUFV2</u>
0.528	0.155	<u>PRTN3</u>

0.518	0.146	<u>C7ORF10</u>
0.523	0.151	<u>RPL17</u>
0.512	0.141	<u>PPP2R5D</u>
0.546	0.176	<u>C2CD2</u>
0.523	0.153	<u>CTSA</u>
0.517	0.148	<u>ADAMTS5</u>
0.520	0.151	<u>RPL37</u>
0.519	0.151	<u>GTF2A1</u>
0.528	0.162	<u>FAM164A</u>
0.551	0.185	<u>HLA-DMA</u>
0.520	0.155	<u>NDP</u>
0.521	0.156	<u>NIT2</u>
0.508	0.143	REM1
0.521	0.157	HAS1
0.535	0.172	<u>TESK2</u>
0.516	0.152	<u>RAPGEF2</u>
0.535	0.171	<u>DDX5</u>
0.533	0.169	<u>SSBP1</u>
0.519	0.156	<u>TYRP1</u>
0.517	0.154	<u>DCUN1D1</u>
0.507	0.144	<u>HAUS3</u>
0.504	0.142	<u>FABP5</u>
0.526	0.164	<u>C8ORF44</u>
0.532	0.169	<u>STAT2</u>
0.501	0.139	<u>LPHN3</u>
0.545	0.185	<u>C4ORF34</u>
0.540	0.180	<u>PHTF2</u>
0.529	0.169	<u>DRG1</u>
0.508	0.148	<u>MAX</u>
0.514	0.155	<u>MIR22HG</u>
0.520	0.161	<u>SLC17A1</u>
0.515	0.157	<u>TBC1D1</u>
0.524	0.166	<u>BNIP3L</u>
0.525	0.169	<u>DYNLT1</u>
0.522	0.166	<u>NEK1</u>
0.538	0.182	<u>TNFSF9</u>
0.510	0.156	<u>STARD13</u>
0.501	0.148	<u>EDNRB</u>
0.504	0.151	GPR171
0.531	0.178	<u>FAF2</u>
0.501	0.148	<u>PINK1</u>
0.515	0.163	<u>POLM</u>
0.504	0.153	<u>RUFY2</u>
0.550	0.199	C14ORF45
0.535	0.185	<u>ANKZF1</u>
0.535	0.184	<u>DNASE1L2</u>
0.503	0.154	<u>KRT34</u>

0.509	0.161	<u>TPP2</u>
0.507	0.161	<u>PPARG</u>
0.510	0.164	<u>ZBED5</u>
0.546	0.201	<u>KCNE4</u>
0.505	0.159	<u>SETX</u>
0.519	0.174	<u>PAX6</u>
0.505	0.161	<u>LGALS9</u>
0.516	0.172	<u>ATF7IP2</u>
0.544	0.201	<u>RBFOX1</u>
0.522	0.179	<u>ZCCHC14</u>
0.518	0.176	<u>B4GALT2</u>
0.521	0.180	<u>FKSG49</u>
0.503	0.163	<u>NUP43</u>
0.503	0.164	<u>PTPN2</u>
0.501	0.163	<u>TASP1</u>
0.501	0.163	<u>C2ORF18</u>
0.501	0.164	<u>DICER1</u>
0.523	0.187	<u>SEC22A</u>
0.504	0.167	<u>NDST3</u>
0.514	0.179	<u>LRRC20</u>
0.510	0.175	<u>AKAP12</u>
0.503	0.168	<u>ZNF528</u>
0.514	0.181	<u>GFPT2</u>
0.512	0.180	<u>HECTD3</u>
0.522	0.190	<u>PSD4</u>
0.503	0.171	<u>HERC6</u>
0.503	0.172	<u>ALPL</u>
0.502	0.173	<u>ATP6V1H</u>
0.509	0.180	<u>SIPA1</u>
0.528	0.200	<u>DHRS9</u>
0.514	0.187	<u>ANXA10</u>
0.511	0.187	<u>MEIS3P1</u>
0.513	0.189	<u>MAGEA5</u>
0.513	0.190	<u>SCAMP1</u>
0.528	0.206	<u>LMBRD1</u>
0.505	0.184	<u>TSFM</u>
0.508	0.188	<u>PRKCH</u>
0.509	0.189	<u>RPL23AP53</u>
0.504	0.184	<u>TCHH</u>
0.510	0.192	<u>MICAL2</u>
0.511	0.193	<u>WIPF1</u>
0.504	0.186	<u>IL2RG</u>
0.515	0.200	<u>POR</u>
0.536	0.227	<u>CCNJ</u>
0.522	0.217	<u>PHF21A</u>
0.508	0.216	<u>PDK1</u>
0.502	0.212	<u>CCL16</u>

0.510	0.230	GNG12	
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VCAP_24h based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.850	0.038	<u>DLL3</u>	0.816	0.039	<u>SF3B5</u>
0.845	0.037	<u>ELANE</u>	0.823	0.056	<u>NDUFAB1</u>
0.838	0.036	<u>TRAT1</u>	0.792	0.042	<u>FAM57A</u>
0.803	0.020	<u>TSGA10</u>	0.776	0.051	<u>SLC50A1</u>
0.779	0.026	<u>SERHL2</u>	0.785	0.062	<u>POP7</u>
0.776	0.028	<u>DPF1</u>	0.759	0.048	<u>MRT04</u>
0.795	0.048	<u>DNAJC13</u>	0.767	0.061	<u>SOAT1</u>
0.802	0.055	<u>SMR3B</u>	0.735	0.053	<u>EXOSC4</u>
0.796	0.051	<u>DKKL1</u>	0.723	0.060	<u>DPAGT1</u>
0.786	0.042	<u>CLCA4</u>	0.727	0.066	<u>SPEF1</u>
0.838	0.098	<u>DIO1</u>	0.726	0.066	<u>TOLLIP</u>
0.798	0.067	<u>DSG3</u>	0.684	0.027	<u>NME1</u>
0.778	0.047	<u>SH3D21</u>	0.695	0.042	<u>TIMM9</u>
0.770	0.040	<u>GNA14</u>	0.701	0.052	<u>GADD45G</u>
0.770	0.041	<u>AKR1B10</u>	0.706	0.076	<u>NDUFV1</u>
0.752	0.027	<u>ARL14</u>	0.712	0.083	<u>POLR3K</u>
0.767	0.045	<u>TBKBP1</u>	0.694	0.066	<u>GOLPH3</u>
0.748	0.028	<u>NRN1</u>	0.691	0.064	<u>PLA2G4A</u>
0.772	0.055	<u>CALML4</u>	0.679	0.057	<u>DBI</u>
0.760	0.047	<u>ELF3</u>	0.680	0.058	<u>OSBPL9</u>
0.791	0.082	<u>CCK</u>	0.689	0.068	<u>SPHK1</u>
0.776	0.066	<u>ERAP2</u>	0.674	0.057	<u>CYB561D2</u>
0.739	0.048	<u>TMEM100</u>	0.670	0.056	<u>F5</u>
0.726	0.038	<u>CRADD</u>	0.664	0.054	<u>LRRC6</u>
0.731	0.043	<u>C1ORF61</u>	0.699	0.090	<u>MCMBP</u>
0.750	0.067	<u>FAM5C</u>	0.680	0.071	<u>TRAF2</u>
0.716	0.036	<u>LARS</u>	0.662	0.055	<u>C14ORF135</u>
0.730	0.051	<u>EHHADH</u>	0.671	0.064	<u>CDC6</u>
0.725	0.046	<u>LOC220594</u>	0.696	0.090	<u>ATP5G3</u>
0.714	0.043	<u>EFNA3</u>	0.665	0.062	<u>GOLPH3L</u>
0.730	0.062	<u>FGF13</u>	0.654	0.052	<u>USP47</u>
0.742	0.080	<u>APH1B</u>	0.649	0.048	<u>NCAPG</u>
0.704	0.042	<u>REG3A</u>	0.668	0.067	<u>FADD</u>
0.745	0.083	<u>AKTIP</u>	0.665	0.064	<u>MLPH</u>
0.723	0.063	<u>EPHX3</u>	0.676	0.080	<u>NCOA3</u>
0.711	0.064	<u>DPEP1</u>	0.666	0.071	<u>CGA</u>
0.686	0.039	<u>CHKB</u>	0.643	0.048	<u>CDR2L</u>
0.697	0.052	<u>LOC100507009</u>	0.716	0.122	<u>ASS1</u>
0.719	0.076	<u>ADIPOR1</u>	0.627	0.033	<u>RPIA</u>
0.718	0.077	<u>DCUN1D2</u>	0.688	0.094	<u>TRMT12</u>
0.683	0.046	<u>SLC35A5</u>	0.688	0.095	<u>THOP1</u>

0.699	0.063	<u>ENPP2</u>	0.668	0.075	<u>GPATCH1</u>
0.701	0.066	<u>PANX1</u>	0.682	0.091	<u>ZMPSTE24</u>
0.713	0.079	<u>PAMR1</u>	0.645	0.058	<u>VEGFC</u>
0.682	0.049	<u>LRRC8D</u>	0.649	0.062	<u>CCDC19</u>
0.694	0.064	<u>FOXG1</u>	0.668	0.083	<u>UBE2D3</u>
0.690	0.063	<u>TPK1</u>	0.684	0.099	<u>CRISPLD2</u>
0.730	0.103	<u>PIEZO2</u>	0.654	0.071	<u>RPS8</u>
0.690	0.063	<u>LACTB2</u>	0.691	0.108	<u>NDUFB2</u>
0.687	0.061	<u>ISL1</u>	0.650	0.069	<u>C17ORF85</u>
0.671	0.052	<u>PDGFD</u>	0.649	0.069	<u>HSD17B1</u>
0.698	0.083	<u>GABARAPL1</u>	0.669	0.089	<u>RFPL2</u>
0.684	0.070	<u>AHNAK</u>	0.659	0.080	<u>SEPHS2</u>
0.683	0.071	<u>C16ORF88</u>	0.637	0.065	<u>EIF3L</u>
0.690	0.078	<u>RSBN1</u>	0.657	0.087	<u>BOLA1</u>
0.675	0.063	<u>LINC00341</u>	0.660	0.091	<u>PTCD3</u>
0.675	0.064	<u>NUDT2</u>	0.618	0.049	<u>NXT1</u>
0.697	0.087	<u>SLC26A4</u>	0.635	0.067	<u>FAM69A</u>
0.670	0.060	<u>SATB1</u>	0.662	0.095	<u>OAS1</u>
0.669	0.060	<u>AKR1C3</u>	0.649	0.084	<u>S100BPB</u>
0.669	0.064	<u>AQR</u>	0.654	0.091	<u>TMEM184B</u>
0.704	0.098	<u>CAPN3</u>	0.629	0.066	<u>NAT10</u>
0.686	0.081	<u>TMED7</u>	0.648	0.086	<u>TNFSF4</u>
0.691	0.086	<u>C12ORF48</u>	0.667	0.106	<u>ACAD8</u>
0.695	0.090	<u>DYNC1H1</u>	0.657	0.096	<u>SOX12</u>
0.672	0.069	<u>ECH1</u>	0.629	0.068	<u>RANBP6</u>
0.671	0.068	<u>C15ORF44</u>	0.627	0.067	<u>CXCL13</u>
0.668	0.065	<u>WFS1</u>	0.634	0.074	<u>ACTR3</u>
0.655	0.053	<u>MORC3</u>	0.668	0.108	<u>TMEM231</u>
0.655	0.055	<u>IER3IP1</u>	0.618	0.058	<u>C8ORF55</u>
0.655	0.056	<u>INS</u>	0.638	0.079	<u>EIF2C3</u>
0.670	0.071	<u>CTRB2</u>	0.667	0.108	<u>TUBA1B</u>
0.658	0.060	<u>TGIF1</u>	0.649	0.090	<u>C5ORF22</u>
0.716	0.121	<u>ALAS2</u>	0.662	0.103	<u>SRSF4</u>
0.670	0.075	<u>KCNG1</u>	0.641	0.083	<u>TARP</u>
0.682	0.088	<u>CCHCR1</u>	0.639	0.082	<u>GABPA</u>
0.641	0.047	<u>ARID5B</u>	0.625	0.068	<u>FRAT2</u>
0.679	0.085	<u>SLC4A1AP</u>	0.648	0.091	<u>ADRA2A</u>
0.648	0.057	<u>TCEA2</u>	0.640	0.083	<u>NUCB2</u>
0.692	0.107	<u>EVPL</u>	0.628	0.072	<u>PC</u>
0.624	0.038	<u>AZI1</u>	0.661	0.105	<u>SFT2D2</u>
0.697	0.113	<u>MYLK3</u>	0.662	0.107	<u>MAP4K2</u>
0.652	0.071	<u>PMP22</u>	0.613	0.058	<u>GSTO1</u>
0.650	0.070	<u>C6ORF145</u>	0.648	0.094	<u>CNIH4</u>
0.666	0.086	<u>UBAP2</u>	0.617	0.063	<u>CD2AP</u>
0.648	0.068	<u>ARHGAP4</u>	0.644	0.090	<u>HBXIP</u>
0.659	0.079	<u>AIFM1</u>	0.651	0.098	<u>ISL1</u>
0.653	0.074	<u>MLH1</u>	0.637	0.085	<u>GPAA1</u>

0.635	0.057	<u>METTL22</u>	0.635	0.084	<u>XBP1</u>
0.669	0.092	<u>ADCY7</u>	0.632	0.081	<u>TIPARP</u>
0.659	0.083	<u>RABEP2</u>	0.625	0.075	<u>CTSC</u>
0.638	0.063	<u>UQCC</u>	0.622	0.072	<u>SEPT8</u>
0.654	0.078	<u>PVRL2</u>	0.626	0.077	<u>NIT2</u>
0.633	0.059	<u>SLC35A1</u>	0.654	0.106	<u>TMEM14B</u>
0.646	0.071	<u>ABCD4</u>	0.637	0.090	<u>CTR9</u>
0.629	0.056	<u>ZNF710</u>	0.619	0.073	<u>GALE</u>
0.670	0.097	<u>SMA4</u>	0.625	0.082	<u>C14ORF133</u>
0.654	0.082	<u>YEATS4</u>	0.596	0.053	<u>RPP25</u>
0.682	0.110	<u>ACADS</u>	0.641	0.098	<u>AP3S1</u>
0.667	0.096	<u>FTO</u>	0.643	0.102	<u>MAD2L1</u>
0.684	0.114	<u>KIAA1024</u>	0.633	0.092	<u>PDE9A</u>
0.646	0.077	<u>PDS5A</u>	0.613	0.072	<u>PIP</u>
0.652	0.084	<u>SCFD1</u>	0.626	0.086	<u>NHP2</u>
0.660	0.094	<u>KRT3</u>	0.627	0.087	<u>ZNF629</u>
0.624	0.057	<u>NHEJ1</u>	0.640	0.101	<u>CDT1</u>
0.654	0.088	<u>MAP6D1</u>	0.641	0.102	<u>TBCB</u>
0.640	0.074	<u>OXA1L</u>	0.619	0.081	<u>FAM106A</u>
0.615	0.050	<u>FAM110B</u>	0.623	0.085	<u>MT1P2</u>
0.692	0.127	<u>UGT8</u>	0.620	0.082	<u>FBL</u>
0.640	0.074	<u>DYNC1LI1</u>	0.628	0.092	<u>DKFZP547G183</u>
0.666	0.101	<u>PLA2G15</u>	0.606	0.070	<u>CCND2</u>
0.626	0.062	<u>POT1</u>	0.590	0.056	<u>HOMER2</u>
0.676	0.112	<u>HTN1</u>	0.631	0.097	<u>HPCAL1</u>
0.625	0.062	<u>KCNIP1</u>	0.623	0.090	<u>MALT1</u>
0.658	0.095	<u>PIGL</u>	0.640	0.108	<u>KIF18A</u>
0.638	0.075	<u>RSL24D1</u>	0.615	0.084	<u>ZRSR2</u>
0.636	0.074	<u>COL17A1</u>	0.612	0.081	<u>FAM179B</u>
0.615	0.053	<u>MEP1A</u>	0.643	0.112	<u>U2AF1</u>
0.631	0.070	<u>PNKP</u>	0.631	0.100	<u>TNFRSF13B</u>
0.646	0.085	<u>COL9A3</u>	0.581	0.053	<u>PLK1</u>
0.648	0.087	<u>ACTR10</u>	0.621	0.094	<u>FLJ13197</u>
0.668	0.107	<u>MAP1B</u>	0.595	0.068	<u>PABPC1</u>
0.654	0.094	<u>CLDN18</u>	0.637	0.110	<u>PES1</u>
0.642	0.082	<u>SERPINE2</u>	0.593	0.067	<u>C21ORF91</u>
0.663	0.104	<u>TNFRSF1B</u>	0.571	0.045	<u>TCFL5</u>
0.643	0.084	<u>TMEM161A</u>	0.593	0.068	<u>CHIC2</u>
0.644	0.085	<u>FAM171A1</u>	0.590	0.066	<u>FAM168B</u>
0.613	0.055	<u>AARS</u>	0.620	0.096	<u>CSNK1G3</u>
0.638	0.081	<u>OPA1</u>	0.605	0.083	<u>ICAM2</u>
0.607	0.050	<u>APOBEC1</u>	0.587	0.066	<u>ATG2B</u>
0.652	0.095	<u>MAGEB2</u>	0.616	0.095	<u>FZD5</u>
0.641	0.086	<u>ASPM</u>	0.627	0.106	<u>DDA1</u>
0.641	0.086	<u>SDAD1</u>	0.605	0.084	<u>SLC13A2</u>
0.655	0.101	<u>HDHD1</u>	0.612	0.091	<u>EIF2C2</u>
0.636	0.083	<u>TBCCD1</u>	0.603	0.083	<u>NME7</u>

0.632	0.080	<u>UBE2S</u>	0.599	0.079	<u>PRMT1</u>
0.641	0.089	<u>MEIS1</u>	0.612	0.092	<u>EFHC1</u>
0.627	0.076	<u>DCAF6</u>	0.607	0.088	<u>FAM171A1</u>
0.608	0.058	<u>PFKM</u>	0.603	0.086	<u>RBM23</u>
0.653	0.104	<u>SLC35C2</u>	0.594	0.078	<u>KCTD3</u>
0.721	0.172	<u>GATA4</u>	0.597	0.082	<u>MRPL17</u>
0.628	0.080	<u>TMBIM4</u>	0.597	0.082	<u>ITGAV</u>
0.619	0.072	<u>ETHE1</u>	0.633	0.119	<u>THYN1</u>
0.640	0.093	<u>PTCRA</u>	0.626	0.114	<u>FSTL3</u>
0.677	0.130	<u>S100A3</u>	0.605	0.093	<u>SH3GL1</u>
0.599	0.055	<u>LMO7</u>	0.595	0.083	<u>VAPB</u>
0.635	0.092	<u>PTCD3</u>	0.618	0.108	<u>DCTPP1</u>
0.624	0.080	<u>PIPOX</u>	0.621	0.111	<u>LRRK1</u>
0.625	0.082	<u>PGRMC2</u>	0.568	0.058	<u>VPS26A</u>
0.632	0.090	<u>VSNL1</u>	0.591	0.082	<u>FAM178A</u>
0.614	0.071	<u>MTMR11</u>	0.623	0.115	<u>MYH10</u>
0.622	0.080	<u>USP3</u>	0.620	0.113	<u>LRRC17</u>
0.652	0.112	<u>ANO3</u>	0.608	0.101	<u>CRNKL1</u>
0.659	0.119	<u>RWDD3</u>	0.599	0.093	<u>PLA1A</u>
0.608	0.070	<u>NT5DC2</u>	0.639	0.133	<u>ATP5O</u>
0.674	0.136	<u>AQP6</u>	0.592	0.087	<u>MRPL12</u>
0.682	0.145	<u>C2ORF44</u>	0.632	0.129	<u>OBFC2B</u>
0.606	0.069	<u>EXOSC5</u>	0.596	0.093	<u>FAM118A</u>
0.610	0.075	<u>TUFT1</u>	0.601	0.098	<u>CCNO</u>
0.608	0.074	<u>CRIP1</u>	0.631	0.129	<u>ANXA3</u>
0.648	0.114	<u>ATAD2B</u>	0.619	0.119	<u>PAX6</u>
0.628	0.095	<u>ABTB2</u>	0.604	0.105	<u>MAN1C1</u>
0.610	0.079	<u>CD96</u>	0.627	0.129	<u>RABGGTA</u>
0.649	0.119	<u>MX2</u>	0.574	0.076	<u>CCT6A</u>
0.618	0.088	<u>SGTA</u>	0.554	0.057	<u>RSRC1</u>
0.620	0.091	<u>CDC14B</u>	0.586	0.090	<u>SETMAR</u>
0.593	0.065	<u>PRG4</u>	0.592	0.095	<u>PROC</u>
0.614	0.086	LOC100506469	0.594	0.098	<u>GBP1</u>
0.646	0.119	<u>SLC43A3</u>	0.593	0.097	<u>CCL21</u>
0.610	0.083	<u>GAP43</u>	0.596	0.100	<u>FAM50B</u>
0.588	0.062	<u>HDAC5</u>	0.564	0.068	<u>NOLC1</u>
0.648	0.122	<u>CCDC41</u>	0.580	0.084	<u>PDE1A</u>
0.588	0.065	<u>ERN2</u>	0.571	0.075	<u>CAD</u>
0.603	0.080	<u>HDAC7</u>	0.586	0.090	<u>FKBP10</u>
0.613	0.091	<u>TSPAN1</u>	0.582	0.087	<u>TKT</u>
0.621	0.099	<u>FLRT3</u>	0.562	0.067	<u>LCN2</u>
0.648	0.128	<u>MED13L</u>	0.596	0.101	<u>HEXB</u>
0.617	0.098	<u>TNS3</u>	0.601	0.108	<u>CARHSP1</u>
0.622	0.105	<u>CCNG2</u>	0.606	0.113	<u>NR2C2</u>
0.612	0.096	<u>IARS</u>	0.606	0.114	<u>PPA1</u>
0.628	0.113	<u>ZNF22</u>	0.564	0.072	<u>KLHL9</u>
0.615	0.100	<u>ETFDH</u>	0.566	0.074	<u>ATAD3A</u>

0.569	0.054	<u>PPCDC</u>	0.580	0.089	<u>FZD10</u>
0.602	0.087	<u>ABCA3</u>	0.573	0.082	<u>CHL1</u>
0.581	0.067	<u>NOL6</u>	0.639	0.148	<u>TPST2</u>
0.591	0.077	LOC100286895	0.603	0.113	C2ORF28
0.613	0.099	<u>FEM1B</u>	0.580	0.091	<u>SIDT1</u>
0.613	0.100	<u>PARP4</u>	0.609	0.120	<u>MRPL4</u>
0.613	0.100	<u>FZD7</u>	0.595	0.106	<u>QSER1</u>
0.632	0.119	<u>OPA3</u>	0.607	0.118	<u>IL21R</u>
0.585	0.073	GPA33	0.572	0.085	<u>METTL18</u>
0.602	0.090	<u>ADAM10</u>	0.577	0.091	<u>EPM2AIP1</u>
0.610	0.099	<u>EPRS</u>	0.593	0.107	<u>NFE2L1</u>
0.606	0.096	ZNF12	0.606	0.120	<u>MAK</u>
0.627	0.117	<u>RAB28</u>	0.612	0.127	<u>IQGAP2</u>
0.600	0.091	<u>PHGDH</u>	0.599	0.114	<u>PPP4R2</u>
0.575	0.067	<u>PLCD1</u>	0.569	0.084	<u>MFAP1</u>
0.598	0.090	<u>FAIM2</u>	0.598	0.113	IGKV3-20
0.591	0.084	<u>IFNGR1</u>	0.583	0.098	<u>UBE2A</u>
0.595	0.088	ZG16	0.558	0.073	<u>DERL2</u>
0.590	0.083	<u>RNF41</u>	0.610	0.127	<u>UBN1</u>
0.597	0.090	<u>GTPBP3</u>	0.571	0.088	<u>LHX1</u>
0.612	0.105	<u>IL17RB</u>	0.554	0.072	<u>ORMDL2</u>
0.611	0.105	<u>DERL1</u>	0.571	0.089	<u>KEAP1</u>
0.611	0.106	<u>CD3EAP</u>	0.594	0.113	<u>FBXL8</u>
0.612	0.106	<u>RMND1</u>	0.626	0.147	<u>CSTF3</u>
0.594	0.089	<u>TOM1L1</u>	0.600	0.121	<u>AKR1A1</u>
0.587	0.082	<u>PYROXD1</u>	0.578	0.098	<u>PILRB</u>
0.651	0.147	<u>EDEM1</u>	0.567	0.088	<u>BRMS1</u>
0.636	0.132	<u>BEX1</u>	0.566	0.087	<u>SPAG1</u>
0.640	0.137	<u>PNRC1</u>	0.591	0.113	<u>INSM1</u>
0.626	0.123	<u>SLC48A1</u>	0.619	0.142	<u>DEXI</u>
0.627	0.124	<u>FAM55C</u>	0.590	0.113	<u>SFXN3</u>
0.577	0.074	<u>IREB2</u>	0.615	0.139	<u>SLCO4A1</u>
0.597	0.094	<u>UNC5B</u>	0.585	0.109	<u>PRRX1</u>
0.642	0.139	<u>HBD</u>	0.576	0.101	<u>DAD1</u>
0.581	0.079	<u>ITGA6</u>	0.605	0.130	<u>ACAP1</u>
0.596	0.094	<u>DAK</u>	0.601	0.127	<u>RETN</u>
0.595	0.094	<u>RPS9</u>	0.578	0.104	LINC00342
0.596	0.096	<u>PIAS1</u>	0.546	0.072	<u>CTDSP1</u>
0.577	0.077	<u>F8</u>	0.564	0.091	<u>ICAM3</u>
0.537	0.037	<u>TRIM17</u>	0.564	0.091	<u>COPS6</u>
0.616	0.116	<u>GNAL</u>	0.577	0.105	<u>TM9SF3</u>
0.605	0.105	<u>LTK</u>	0.596	0.124	<u>DYNLT1</u>
0.581	0.083	<u>C10ORF88</u>	0.570	0.098	<u>SCGB1D2</u>
0.589	0.092	<u>RGS2</u>	0.580	0.108	C7ORF28B
0.610	0.113	<u>PLEKHA1</u>	0.606	0.134	<u>PSMC1</u>
0.593	0.096	<u>NCKAP1</u>	0.573	0.102	<u>CSTF1</u>
0.567	0.070	C9ORF82	0.602	0.131	<u>C1ORF106</u>

0.606	0.110	<u>CKAP5</u>	0.575	0.105	<u>BRE</u>
0.587	0.091	<u>SNX15</u>	0.604	0.133	<u>CYP27B1</u>
0.617	0.121	<u>SMARCC2</u>	0.541	0.071	<u>RDH14</u>
0.602	0.106	LOC283683	0.556	0.086	<u>RRAGA</u>
0.582	0.087	<u>FADD</u>	0.587	0.117	<u>ZBBX</u>
0.619	0.124	<u>PFDN5</u>	0.567	0.098	<u>CCDC15</u>
0.590	0.095	<u>KIAA0922</u>	0.596	0.127	<u>CD38</u>
0.594	0.100	<u>IFITM3</u>	0.535	0.067	<u>RPL34</u>
0.603	0.110	<u>LHPP</u>	0.564	0.096	<u>CRNN</u>
0.588	0.095	<u>MARK4</u>	0.565	0.097	<u>MMADHC</u>
0.628	0.135	<u>CDKN2AIP</u>	0.589	0.121	C6ORF120
0.584	0.092	LOC100129361	0.588	0.121	<u>TSSC1</u>
0.603	0.111	<u>C5AR1</u>	0.569	0.103	<u>KIFC1</u>
0.605	0.113	<u>PLS3</u>	0.586	0.120	<u>CCNB1</u>
0.596	0.104	<u>VAT1</u>	0.553	0.087	<u>INPP1</u>
0.548	0.057	<u>CERS4</u>	0.566	0.102	GRRP1
0.555	0.064	<u>DNMT1</u>	0.576	0.113	<u>XAB2</u>
0.601	0.110	<u>SLC18A2</u>	0.572	0.108	<u>ACOT8</u>
0.565	0.075	<u>DNAJA4</u>	0.565	0.102	<u>PTRH2</u>
0.582	0.092	<u>FADS3</u>	0.582	0.119	<u>TTC30A</u>
0.565	0.076	<u>LRRC59</u>	0.574	0.112	<u>KIF3B</u>
0.613	0.124	<u>PTGIR</u>	0.565	0.103	<u>TUBBP5</u>
0.609	0.120	<u>SLC7A10</u>	0.586	0.124	<u>C3</u>
0.584	0.097	<u>RPL28</u>	0.583	0.121	<u>HIST1H4B</u>
0.629	0.143	<u>CEPT1</u>	0.573	0.112	<u>PFKP</u>
0.585	0.099	<u>NECAP2</u>	0.584	0.123	<u>LARS2</u>
0.577	0.091	<u>RHOT1</u>	0.569	0.108	<u>MLXIPL</u>
0.578	0.092	<u>MAST2</u>	0.598	0.137	<u>TRIM9</u>
0.591	0.105	<u>FLNA</u>	0.562	0.102	<u>MYBL2</u>
0.578	0.093	<u>CEACAM6</u>	0.586	0.126	<u>PDE5A</u>
0.547	0.063	<u>TINF2</u>	0.589	0.129	<u>TMSB10</u>
0.577	0.093	<u>GNB2L1</u>	0.574	0.115	<u>CORO2A</u>
0.588	0.104	<u>STMN1</u>	0.583	0.125	ZSCAN16
0.575	0.091	<u>NIF3L1</u>	0.547	0.090	<u>NID2</u>
0.584	0.101	<u>KRT5</u>	0.570	0.113	<u>SLMO2</u>
0.582	0.099	<u>C4ORF27</u>	0.513	0.056	<u>CDC20</u>
0.556	0.074	<u>DRAM1</u>	0.561	0.105	ZNF10
0.599	0.117	<u>HMGCS2</u>	0.562	0.105	<u>ERG</u>
0.583	0.103	<u>CITED2</u>	0.562	0.106	<u>EMID1</u>
0.572	0.092	<u>BCORL1</u>	0.572	0.116	<u>HELLS</u>
0.607	0.127	<u>PINK1</u>	0.542	0.086	<u>CLEC11A</u>
0.589	0.110	C13ORF27	0.586	0.130	<u>ZBED1</u>
0.606	0.127	<u>TFF2</u>	0.589	0.133	FOXH1
0.572	0.093	<u>RPH3AL</u>	0.565	0.110	<u>PPP6R3</u>
0.560	0.081	<u>TPMT</u>	0.572	0.117	<u>PROS1</u>
0.577	0.098	<u>AASS</u>	0.565	0.110	<u>PRRC2B</u>
0.583	0.105	<u>KIAA0355</u>	0.623	0.169	<u>IMPDH2</u>

0.549	0.071	<u>NSMAF</u>	0.549	0.094	<u>BTBD3</u>
0.600	0.122	<u>SNX24</u>	0.550	0.096	<u>PSMA6</u>
0.592	0.114	<u>SMARCD1</u>	0.571	0.117	<u>PTX3</u>
0.601	0.124	<u>FAF2</u>	0.563	0.109	<u>GOLGA4</u>
0.600	0.123	<u>IRS2</u>	0.575	0.122	<u>ID1</u>
0.562	0.084	<u>GTF2E2</u>	0.569	0.117	<u>UBB</u>
0.581	0.104	<u>COPB2</u>	0.565	0.113	<u>LIMS3</u>
0.588	0.111	<u>LYN</u>	0.550	0.098	<u>MOGS</u>
0.565	0.089	<u>AGXT2L1</u>	0.582	0.131	<u>ATP5L</u>
0.588	0.113	<u>CST3</u>	0.593	0.143	<u>OFD1</u>
0.546	0.071	<u>SMYD5</u>	0.586	0.136	<u>CHMP4A</u>
0.564	0.089	<u>ATP11A</u>	0.574	0.123	<u>AKR1D1</u>
0.556	0.081	<u>IER3</u>	0.565	0.115	<u>EIF3M</u>
0.576	0.102	<u>TMEM41B</u>	0.532	0.083	<u>PELO</u>
0.581	0.107	<u>PCTP</u>	0.570	0.121	<u>CHAC1</u>
0.602	0.128	<u>SALL1</u>	0.576	0.128	<u>TULP1</u>
0.587	0.113	<u>TNRC6B</u>	0.561	0.113	<u>ZNF124</u>
0.586	0.112	<u>CLSTN1</u>	0.569	0.121	<u>PIAS3</u>
0.589	0.115	<u>PDE8B</u>	0.580	0.133	<u>GOLGA8A</u>
0.553	0.080	<u>SLC41A3</u>	0.567	0.121	<u>ZMIZ1</u>
0.614	0.141	<u>BDNF</u>	0.576	0.130	<u>IVNS1ABP</u>
0.553	0.081	<u>PPIE</u>	0.577	0.132	<u>FJX1</u>
0.556	0.086	<u>EMP1</u>	0.554	0.109	<u>RRP8</u>
0.566	0.095	<u>SGPP1</u>	0.541	0.096	<u>TDO2</u>
0.571	0.101	<u>FJX1</u>	0.540	0.094	<u>ORC1</u>
0.617	0.146	<u>YPEL5</u>	0.552	0.107	<u>BASP1</u>
0.559	0.089	<u>MAP1S</u>	0.562	0.118	<u>COQ4</u>
0.539	0.069	<u>FOXF2</u>	0.556	0.111	<u>PUS7</u>
0.558	0.089	<u>SPEG</u>	0.559	0.115	<u>DGKZ</u>
0.579	0.109	<u>PSPH</u>	0.566	0.122	<u>ZNF337</u>
0.590	0.121	<u>PDK4</u>	0.555	0.112	<u>TPR</u>
0.567	0.098	<u>EEF1B2</u>	0.576	0.133	<u>FGF17</u>
0.595	0.126	<u>SLTM</u>	0.605	0.162	<u>SNRPE</u>
0.537	0.069	<u>LPPR3</u>	0.554	0.112	<u>PRSS8</u>
0.571	0.103	<u>BAG4</u>	0.564	0.122	<u>C15ORF5</u>
0.534	0.067	<u>RHOA</u>	0.559	0.118	<u>TSPAN13</u>
0.552	0.085	<u>TLR2</u>	0.570	0.129	<u>SLC9A3R2</u>
0.562	0.096	<u>USP11</u>	0.556	0.116	<u>CPEB3</u>
0.560	0.093	<u>IMPACT</u>	0.550	0.109	<u>CCL5</u>
0.567	0.101	<u>NENF</u>	0.538	0.099	<u>MORF4L2</u>
0.590	0.124	<u>SMARCE1</u>	0.546	0.107	<u>BATF3</u>
0.553	0.087	<u>TCTN2</u>	0.550	0.111	<u>PPP2R3C</u>
0.584	0.119	<u>PGRMC1</u>	0.557	0.119	<u>MAP3K11</u>
0.592	0.127	<u>LGR4</u>	0.545	0.108	<u>RAI14</u>
0.568	0.103	<u>LIN7A</u>	0.545	0.108	<u>CENPF</u>
0.571	0.106	<u>TUSC3</u>	0.548	0.111	<u>SLC26A6</u>
0.559	0.094	<u>TNFRSF12A</u>	0.526	0.091	<u>PLP2</u>

0.562	0.098	<u>RPS6KA3</u>	0.565	0.130	<u>DNAL4</u>
0.551	0.088	<u>UGT2A3</u>	0.556	0.121	<u>MT1H</u>
0.564	0.101	<u>C9ORF40</u>	0.545	0.111	<u>GIMAP6</u>
0.581	0.118	<u>OAZ2</u>	0.543	0.109	<u>NIP7</u>
0.580	0.117	<u>CDK5RAP2</u>	0.556	0.123	<u>G3BP2</u>
0.579	0.117	<u>RALBP1</u>	0.562	0.130	<u>UBXN1</u>
0.529	0.067	<u>LYZ</u>	0.558	0.127	<u>DLGAP5</u>
0.589	0.128	<u>SPRR1A</u>	0.539	0.107	<u>ANKRD36</u>
0.606	0.145	<u>TUBGCP4</u>	0.547	0.116	<u>TMPRSS2</u>
0.536	0.075	<u>DHRS3</u>	0.550	0.120	<u>FANCI</u>
0.560	0.100	<u>CAD</u>	0.552	0.122	<u>NUMA1</u>
0.566	0.105	<u>UIMC1</u>	0.526	0.096	<u>CADPS2</u>
0.601	0.141	<u>HR</u>	0.563	0.134	<u>SEMG1</u>
0.570	0.110	<u>SLC29A3</u>	0.555	0.126	<u>PNMA1</u>
0.575	0.116	<u>ITGAX</u>	0.558	0.130	<u>SLC22A18AS</u>
0.565	0.106	<u>GRB10</u>	0.552	0.124	<u>SORL1</u>
0.552	0.093	<u>CTCF</u>	0.543	0.115	<u>ASL</u>
0.565	0.107	<u>TERF2IP</u>	0.520	0.092	<u>IFI44</u>
0.607	0.149	<u>AHCTF1</u>	0.570	0.142	<u>ZFAND1</u>
0.575	0.118	<u>YLPM1</u>	0.551	0.124	<u>DDI2</u>
0.545	0.088	<u>PCMTD2</u>	0.535	0.109	<u>IGFBP4</u>
0.608	0.152	<u>GLCE</u>	0.529	0.104	<u>KDELC1</u>
0.620	0.164	<u>IGKV4-1</u>	0.547	0.123	<u>GTF2A2</u>
0.580	0.124	<u>DENND4B</u>	0.528	0.105	<u>DZANK1</u>
0.600	0.144	<u>CD1A</u>	0.572	0.148	<u>TPX2</u>
0.584	0.130	<u>CHMP1A</u>	0.562	0.138	<u>TLL3</u>
0.556	0.101	<u>B3GNT1</u>	0.542	0.119	<u>LTA4H</u>
0.567	0.113	<u>STRN3</u>	0.544	0.121	<u>FMO1</u>
0.546	0.091	<u>ARHGAP15</u>	0.548	0.125	<u>KRT8P12</u>
0.581	0.128	<u>FAM114A1</u>	0.533	0.110	<u>SAT1</u>
0.570	0.117	<u>RUVBL1</u>	0.527	0.105	<u>PISD</u>
0.575	0.122	<u>ATP5B</u>	0.551	0.129	<u>CLK2</u>
0.565	0.113	<u>SCMH1</u>	0.548	0.127	<u>IRF1</u>
0.557	0.105	<u>WRN</u>	0.555	0.135	<u>AURKA</u>
0.522	0.070	<u>ODAM</u>	0.519	0.099	<u>PLOD2</u>
0.588	0.137	<u>RRAS2</u>	0.539	0.119	<u>CNDP2</u>
0.561	0.109	<u>LTBR</u>	0.557	0.138	<u>ITB</u>
0.562	0.110	<u>ASAP1</u>	0.538	0.119	<u>TNNC1</u>
0.553	0.101	<u>ATP6V0A1</u>	0.541	0.122	<u>DUSP13</u>
0.570	0.118	<u>TMEM97</u>	0.565	0.147	<u>PRR7</u>
0.544	0.093	<u>MECR</u>	0.517	0.100	<u>TMEM185B</u>
0.564	0.114	<u>U2AF1</u>	0.535	0.118	<u>ELAVL3</u>
0.586	0.136	<u>GSTM4</u>	0.547	0.132	<u>HDGF</u>
0.560	0.110	<u>CHERP</u>	0.538	0.123	<u>RRP7A</u>
0.551	0.101	<u>CIDEB</u>	0.536	0.121	<u>MXD1</u>
0.551	0.102	<u>OSGEP</u>	0.544	0.129	<u>C11ORF58</u>
0.565	0.116	<u>ACTA1</u>	0.540	0.126	<u>UAP1L1</u>

0.557	0.109	<u>DPYSL2</u>	0.524	0.109	<u>ESF1</u>
0.530	0.083	<u>FOXO3</u>	0.533	0.118	<u>KIAA0355</u>
0.549	0.102	<u>NAT2</u>	0.553	0.138	<u>FOXC2</u>
0.594	0.147	<u>L1TD1</u>	0.533	0.118	<u>ZNF165</u>
0.554	0.108	<u>RPL23</u>	0.518	0.103	<u>ASPM</u>
0.546	0.100	<u>ABCA8</u>	0.559	0.146	<u>IST1</u>
0.548	0.102	<u>APPL1</u>	0.522	0.110	<u>SLC12A1</u>
0.562	0.117	<u>UBE2D2</u>	0.535	0.123	<u>PALMD</u>
0.574	0.129	<u>RB1CC1</u>	0.573	0.161	<u>GPX1</u>
0.564	0.119	<u>UBAP1</u>	0.524	0.113	<u>MRPS31</u>
0.547	0.102	<u>MTCP1NB</u>	0.548	0.137	<u>WDR59</u>
0.542	0.097	<u>DOCK4</u>	0.540	0.129	<u>PSD3</u>
0.577	0.133	<u>HOXD11</u>	0.518	0.107	<u>HYMAI</u>
0.548	0.104	<u>CYP3A5</u>	0.515	0.104	<u>SCAMP3</u>
0.565	0.121	<u>RCE1</u>	0.549	0.139	<u>ABHD10</u>
0.558	0.115	<u>DUSP8</u>	0.525	0.115	<u>CIB1</u>
0.546	0.102	<u>MORF4L2</u>	0.541	0.131	<u>DFNA5</u>
0.571	0.127	<u>MTUS1</u>	0.526	0.117	<u>VAX2</u>
0.562	0.120	<u>FAM82A2</u>	0.542	0.133	<u>MYC</u>
0.574	0.132	<u>TAF1C</u>	0.518	0.110	<u>ZNF185</u>
0.601	0.159	<u>YIPF5</u>	0.532	0.124	<u>LIMK2</u>
0.608	0.166	<u>LOC100127972</u>	0.559	0.151	<u>HIST1H2BM</u>
0.556	0.114	<u>C6ORF108</u>	0.542	0.134	<u>ARFIP1</u>
0.544	0.102	<u>ZNF219</u>	0.531	0.124	<u>BTN3A3</u>
0.576	0.135	<u>AP3M2</u>	0.515	0.109	<u>NDUFB11</u>
0.587	0.146	<u>TEX261</u>	0.560	0.155	<u>MARCH5</u>
0.548	0.108	<u>SERPINI1</u>	0.550	0.145	<u>MEIS2</u>
0.549	0.109	<u>HAUS6</u>	0.539	0.134	<u>LEFTY2</u>
0.555	0.116	<u>CNOT6</u>	0.529	0.123	<u>POLI</u>
0.573	0.134	<u>SEC61G</u>	0.544	0.140	<u>C22ORF29</u>
0.518	0.079	<u>ALPK3</u>	0.532	0.129	<u>LOC644450</u>
0.602	0.165	<u>AQP9</u>	0.547	0.144	<u>RPP14</u>
0.550	0.114	<u>LAD1</u>	0.533	0.130	<u>NFS1</u>
0.530	0.094	<u>POF1B</u>	0.530	0.127	<u>ARNT2</u>
0.552	0.116	<u>ADIPOR2</u>	0.528	0.125	<u>IFITM3</u>
0.568	0.133	<u>KARS</u>	0.528	0.126	<u>IFIT1</u>
0.556	0.121	<u>HHIPL2</u>	0.529	0.128	<u>POGK</u>
0.528	0.093	<u>SLC6A4</u>	0.535	0.134	<u>ZNF573</u>
0.550	0.115	<u>ZNF358</u>	0.551	0.150	<u>ZBTB48</u>
0.555	0.121	<u>ATXN2</u>	0.507	0.107	<u>ZNF268</u>
0.556	0.121	<u>MYO1C</u>	0.518	0.119	<u>FOXM1</u>
0.558	0.124	<u>APBA2</u>	0.542	0.144	<u>PODXL2</u>
0.536	0.103	<u>RNF44</u>	0.539	0.141	<u>PTPRK</u>
0.556	0.123	<u>MAK16</u>	0.541	0.143	<u>TENC1</u>
0.558	0.125	<u>COL11A1</u>	0.573	0.175	<u>CCR9</u>
0.558	0.126	<u>ADAM17</u>	0.533	0.136	<u>MALL</u>
0.526	0.094	<u>ELOVL2</u>	0.514	0.118	<u>ASCC1</u>

0.552	0.120	<u>MOB3B</u>	0.527	0.130	<u>IDH3B</u>
0.549	0.118	<u>MAPT</u>	0.524	0.128	<u>PAF1</u>
0.522	0.091	<u>JAK1</u>	0.536	0.140	<u>HSPA8</u>
0.565	0.134	<u>KCTD5</u>	0.542	0.147	<u>ARPC5</u>
0.572	0.142	<u>CUL4A</u>	0.512	0.117	<u>PHF10</u>
0.531	0.101	<u>UBE2K</u>	0.521	0.125	<u>CFB</u>
0.574	0.144	<u>CRYL1</u>	0.515	0.121	<u>SLC25A37</u>
0.572	0.142	<u>C16ORF7</u>	0.513	0.119	<u>TBP</u>
0.537	0.107	<u>C20ORF4</u>	0.502	0.108	<u>TXNL1</u>
0.546	0.115	<u>PSMG2</u>	0.528	0.134	<u>UCP2</u>
0.590	0.161	<u>ABR</u>	0.508	0.115	<u>CASP3</u>
0.533	0.104	<u>PPL</u>	0.528	0.135	<u>CSN1S1</u>
0.538	0.109	<u>SEC24B</u>	0.509	0.116	<u>SSB</u>
0.562	0.133	<u>TTC33</u>	0.544	0.154	<u>TRMT1</u>
0.551	0.123	<u>RALGPS1</u>	0.510	0.120	<u>DYM</u>
0.524	0.095	<u>GATAD1</u>	0.564	0.174	<u>SNRPB2</u>
0.565	0.138	<u>MTMR4</u>	0.533	0.144	<u>SMTN</u>
0.541	0.114	<u>MYL12A</u>	0.507	0.117	<u>CENPM</u>
0.544	0.117	<u>RCBTB1</u>	0.538	0.149	<u>CENPB</u>
0.536	0.110	<u>ABCB4</u>	0.516	0.127	<u>PFDN2</u>
0.542	0.116	<u>NDUFAF4</u>	0.513	0.125	<u>SIX1</u>
0.569	0.143	<u>CSDE1</u>	0.533	0.144	<u>CDK18</u>
0.515	0.088	<u>PPP2R5A</u>	0.554	0.166	<u>ITM2B</u>
0.520	0.094	<u>DCAF17</u>	0.525	0.137	<u>NUP43</u>
0.543	0.118	<u>PLP1</u>	0.539	0.151	<u>PCDHA10</u>
0.553	0.127	<u>GPRC5A</u>	0.517	0.130	<u>FRAT1</u>
0.518	0.093	<u>ALAS1</u>	0.533	0.146	<u>PCDHGA9</u>
0.550	0.124	<u>CREBL2</u>	0.519	0.132	<u>COL6A3</u>
0.540	0.115	<u>MFF</u>	0.504	0.117	<u>ITFG1</u>
0.528	0.104	<u>RPL29</u>	0.515	0.129	<u>GNA12</u>
0.528	0.103	<u>SPINK4</u>	0.528	0.143	<u>DYSF</u>
0.548	0.124	<u>UGGT2</u>	0.511	0.126	<u>TRIM36</u>
0.571	0.147	<u>LINC00472</u>	0.520	0.135	<u>CCNE2</u>
0.530	0.106	<u>CDO1</u>	0.546	0.162	<u>IL36A</u>
0.528	0.105	<u>RPS8</u>	0.529	0.145	<u>DAAM1</u>
0.566	0.143	<u>PLEKHB1</u>	0.530	0.146	<u>TPRKB</u>
0.523	0.099	<u>RTN4</u>	0.527	0.143	<u>GPR20</u>
0.544	0.121	<u>COL6A2</u>	0.504	0.120	<u>TFAP2A</u>
0.529	0.107	<u>SREK1IP1</u>	0.515	0.132	<u>C14ORF109</u>
0.544	0.123	<u>ODF2</u>	0.531	0.147	<u>GIMAP4</u>
0.571	0.150	<u>CACNB3</u>	0.534	0.151	<u>EPHB1</u>
0.522	0.101	<u>CSGALNACT2</u>	0.530	0.148	<u>ZNF204P</u>
0.535	0.114	<u>HSPA13</u>	0.501	0.120	<u>SEPX1</u>
0.541	0.121	<u>PIM1</u>	0.534	0.153	<u>PLK4</u>
0.521	0.101	<u>BRIX1</u>	0.515	0.135	<u>ARL8B</u>
0.564	0.144	<u>TPM2</u>	0.542	0.162	<u>HAPLN1</u>
0.549	0.129	<u>PRPH</u>	0.516	0.136	<u>FAM46C</u>

0.540	0.121	<u>RPS29</u>	0.535	0.157	<u>SLC9A2</u>
0.523	0.103	<u>HMGCR</u>	0.529	0.152	<u>TNN</u>
0.560	0.141	<u>IRF5</u>	0.519	0.142	<u>CLN6</u>
0.505	0.086	<u>RRP1B</u>	0.512	0.135	<u>FER</u>
0.515	0.096	<u>CETP</u>	0.523	0.146	<u>COLQ</u>
0.540	0.121	<u>C12ORF10</u>	0.517	0.140	<u>TMEM156</u>
0.542	0.124	<u>GSN</u>	0.543	0.167	<u>SF3A2</u>
0.526	0.108	<u>APTX</u>	0.515	0.139	<u>TGFBRAP1</u>
0.571	0.153	<u>ODF1</u>	0.534	0.159	<u>ATP6V0E2</u>
0.539	0.122	<u>NFKBIA</u>	0.509	0.134	<u>P2RY10</u>
0.596	0.179	<u>ZNF124</u>	0.528	0.154	<u>GCM1</u>
0.555	0.139	<u>SLC9A5</u>	0.524	0.150	<u>SLC37A1</u>
0.557	0.140	<u>CCNJ</u>	0.510	0.137	<u>BCLAF1</u>
0.559	0.143	<u>RIPK4</u>	0.507	0.134	<u>KIF3A</u>
0.520	0.103	<u>PRRG1</u>	0.529	0.156	<u>COL5A1</u>
0.549	0.133	<u>HERC2</u>	0.520	0.148	<u>GYPE</u>
0.542	0.126	<u>PCP4</u>	0.540	0.169	<u>TNMD</u>
0.559	0.144	<u>TBL1XR1</u>	0.511	0.140	<u>KIAA1661</u>
0.599	0.184	<u>PHLDA3</u>	0.526	0.155	<u>HIST1H1B</u>
0.538	0.123	<u>RPL9</u>	0.523	0.152	<u>FGF3</u>
0.526	0.111	<u>TRAP1</u>	0.521	0.150	<u>PER3</u>
0.552	0.137	<u>NEFM</u>	0.506	0.135	<u>NADSYN1</u>
0.505	0.091	<u>ABHD3</u>	0.514	0.144	<u>MTIF2</u>
0.528	0.114	<u>RPS7</u>	0.522	0.152	<u>CLDN8</u>
0.587	0.173	<u>CRY2</u>	0.524	0.154	<u>ZNF783</u>
0.514	0.100	<u>RPS3</u>	0.522	0.153	<u>ETV1</u>
0.566	0.152	<u>EPB49</u>	0.525	0.157	<u>PAX1</u>
0.557	0.145	<u>ROD1</u>	0.521	0.153	<u>EFCAB1</u>
0.551	0.138	<u>PLXNA1</u>	0.511	0.143	<u>C20ORF46</u>
0.593	0.181	<u>RHBG</u>	0.509	0.141	<u>RIPK4</u>
0.553	0.143	<u>VCAN</u>	0.529	0.161	<u>NEUROG3</u>
0.524	0.114	<u>TFCP2</u>	0.506	0.139	<u>REC8</u>
0.594	0.184	<u>CBY1</u>	0.510	0.142	<u>PLAGL1</u>
0.549	0.140	<u>RPS6</u>	0.503	0.135	<u>PORCN</u>
0.503	0.095	<u>CEP192</u>	0.515	0.148	<u>WDR52</u>
0.535	0.126	<u>GDAP1L1</u>	0.508	0.141	<u>LOC390940</u>
0.540	0.131	<u>MAN2B2</u>	0.502	0.135	<u>SH3D21</u>
0.535	0.127	<u>C9ORF46</u>	0.521	0.155	<u>CYP39A1</u>
0.527	0.119	<u>H2BFS</u>	0.506	0.141	<u>C1ORF54</u>
0.522	0.115	<u>MYLK</u>	0.517	0.152	<u>HSPA4</u>
0.512	0.105	<u>WSCD1</u>	0.520	0.156	<u>FABP5</u>
0.556	0.149	<u>PHF16</u>	0.527	0.162	<u>CNPPD1</u>
0.515	0.109	<u>TCEA1</u>	0.517	0.152	<u>IDO1</u>
0.527	0.122	<u>PDIA4</u>	0.529	0.165	<u>REPIN1</u>
0.570	0.165	<u>SOSTDC1</u>	0.504	0.141	<u>CPNE7</u>
0.559	0.154	<u>ENOX2</u>	0.512	0.149	<u>PKN2</u>
0.547	0.142	<u>BCL7A</u>	0.531	0.168	<u>IL24</u>

0.522	0.118	<u>RPL13</u>	0.520	0.157	<u>ESRP2</u>
0.556	0.152	<u>RASSF4</u>	0.528	0.165	<u>PDE4B</u>
0.525	0.121	<u>ZFAND5</u>	0.511	0.150	<u>SATB2</u>
0.510	0.107	<u>BRF2</u>	0.503	0.142	<u>OTUD4</u>
0.610	0.207	<u>SH3BP1</u>	0.503	0.142	<u>MKKS</u>
0.514	0.111	<u>RPL36A</u>	0.518	0.158	<u>CKB</u>
0.520	0.118	<u>DNAJB9</u>	0.520	0.160	<u>NAT6</u>
0.537	0.135	<u>CHST2</u>	0.520	0.160	<u>SCGB2A1</u>
0.508	0.106	<u>SNX6</u>	0.512	0.153	<u>ICA1</u>
0.517	0.116	<u>ARFIP2</u>	0.519	0.160	<u>SLC13A4</u>
0.572	0.171	<u>MARCH8</u>	0.532	0.173	<u>FBN1</u>
0.549	0.149	<u>ATP6V0D1</u>	0.511	0.152	<u>RPS14P3</u>
0.536	0.137	<u>NFKBIL1</u>	0.514	0.155	<u>HOXB1</u>
0.525	0.125	<u>ANXA7</u>	0.522	0.163	<u>ARHGEF7</u>
0.531	0.132	<u>DTWD1</u>	0.505	0.148	<u>ANKRD12</u>
0.524	0.125	<u>OSBPL1A</u>	0.507	0.149	<u>DDIT4</u>
0.564	0.166	<u>MAP1LC3C</u>	0.510	0.153	<u>FBXW4P1</u>
0.539	0.141	<u>BBC3</u>	0.511	0.153	<u>TMEM30B</u>
0.581	0.183	<u>SMCHD1</u>	0.507	0.150	<u>SRPX</u>
0.524	0.127	<u>CYR61</u>	0.501	0.145	<u>RPS2P45</u>
0.538	0.141	<u>CHMP3</u>	0.535	0.179	<u>SCARF1</u>
0.564	0.167	<u>HNRNPH2</u>	0.514	0.159	<u>HDAC6</u>
0.574	0.178	<u>DNMBP</u>	0.501	0.146	<u>EYA4</u>
0.533	0.136	<u>WDR3</u>	0.506	0.151	<u>HIST1H2BC</u>
0.555	0.159	<u>MUC5AC</u>	0.502	0.148	<u>C19ORF2</u>
0.567	0.172	<u>PCYOX1L</u>	0.505	0.151	<u>TRIM33</u>
0.533	0.138	<u>IDH3G</u>	0.508	0.155	<u>XK</u>
0.512	0.117	<u>HOXC10</u>	0.503	0.150	<u>GPR97</u>
0.518	0.123	<u>USP14</u>	0.522	0.170	<u>FFAR3</u>
0.551	0.156	<u>HIF1AN</u>	0.524	0.173	<u>HIST1H1D</u>
0.538	0.143	<u>ARHGEF2</u>	0.516	0.164	<u>LAMTOR2</u>
0.508	0.114	<u>TRAPPC6A</u>	0.514	0.162	<u>KCNC3</u>
0.519	0.125	<u>SERPINA4</u>	0.517	0.166	<u>SIX5</u>
0.518	0.124	<u>NFYB</u>	0.507	0.155	<u>ZNF280D</u>
0.506	0.112	<u>RPL6</u>	0.514	0.163	<u>ITPR1</u>
0.570	0.176	<u>AOAH</u>	0.513	0.162	<u>SUV39H2</u>
0.544	0.150	<u>MEIS3P1</u>	0.520	0.169	<u>MCM5</u>
0.539	0.145	<u>SEMA6A</u>	0.509	0.158	<u>PRKACG</u>
0.536	0.143	<u>METTL2B</u>	0.515	0.165	<u>SH3BGRL3</u>
0.520	0.127	<u>SH3BGRL3</u>	0.510	0.161	<u>FGF23</u>
0.535	0.142	<u>DCTN4</u>	0.501	0.153	<u>RRAD</u>
0.541	0.149	<u>ACSBG1</u>	0.513	0.165	<u>EPHB4</u>
0.540	0.148	<u>STXBP2</u>	0.502	0.155	<u>UCP1</u>
0.541	0.149	<u>FXYD3</u>	0.506	0.158	<u>MGC12488</u>
0.536	0.144	<u>CLIC3</u>	0.515	0.168	<u>PTBP2</u>
0.506	0.114	<u>CLEC11A</u>	0.501	0.154	<u>UBA7</u>
0.509	0.117	<u>DMBT1</u>	0.510	0.163	<u>MPV17</u>

0.521	0.130	<u>CCNC</u>	0.518	0.172	<u>CYP11B2</u>
0.524	0.132	<u>ZC3H14</u>	0.509	0.163	<u>ARAP1</u>
0.551	0.160	<u>CD80</u>	0.505	0.159	<u>USP32</u>
0.535	0.144	<u>TMSB10</u>	0.520	0.174	<u>C1ORF38</u>
0.504	0.114	<u>PRPF8</u>	0.521	0.176	<u>TCN2</u>
0.517	0.127	<u>CAMTA1</u>	0.509	0.164	<u>DCN</u>
0.544	0.154	<u>CIC</u>	0.502	0.158	<u>WNT7A</u>
0.515	0.126	<u>WDR74</u>	0.501	0.157	<u>IMMT</u>
0.522	0.133	<u>LIAS</u>	0.518	0.176	<u>PAGE4</u>
0.542	0.154	<u>BTBD1</u>	0.506	0.164	<u>RAPGEF3</u>
0.519	0.132	<u>BBS7</u>	0.503	0.161	<u>CEP170</u>
0.541	0.154	<u>FERMT1</u>	0.503	0.162	<u>FAM164C</u>
0.523	0.137	<u>SLC22A18</u>	0.501	0.160	<u>TWSG1</u>
0.509	0.124	<u>GIMAP5</u>	0.526	0.185	<u>MTCH2</u>
0.514	0.129	<u>F9</u>	0.521	0.181	<u>DACH1</u>
0.528	0.142	<u>ST8SIA5</u>	0.506	0.166	<u>TYMS</u>
0.545	0.160	<u>MAGEA12</u>	0.506	0.167	<u>MAPRE3</u>
0.535	0.150	<u>PPM1A</u>	0.506	0.168	<u>PDSS2</u>
0.529	0.143	<u>VCAM1</u>	0.504	0.166	<u>C10ORF92</u>
0.552	0.168	<u>ARFGAP3</u>	0.503	0.165	<u>TTC38</u>
0.512	0.127	<u>KLHDC2</u>	0.508	0.171	<u>KIF24</u>
0.530	0.145	<u>APOL1</u>	0.518	0.184	<u>HMGN3</u>
0.508	0.124	<u>EIF2B3</u>	0.519	0.185	<u>ACTA1</u>
0.543	0.159	<u>CASP2</u>	0.530	0.197	<u>TRIM5</u>
0.512	0.129	<u>NSUN5P2</u>	0.507	0.175	<u>ALPP</u>
0.527	0.144	<u>DLG1</u>	0.502	0.173	<u>ASTE1</u>
0.522	0.138	<u>STX10</u>	0.511	0.184	<u>IGLL3P</u>
0.557	0.175	<u>EPB41L2</u>	0.505	0.178	<u>PRR16</u>
0.528	0.145	<u>NANOG</u>	0.501	0.175	<u>CDH11</u>
0.543	0.161	<u>TAC3</u>	0.501	0.176	<u>RASIP1</u>
0.508	0.126	<u>HPRT1</u>	0.506	0.184	<u>SMPD3</u>
0.539	0.157	<u>STC1</u>	0.502	0.183	<u>ACTL7A</u>
0.510	0.128	<u>DMRT1</u>	0.511	0.193	<u>DCPS</u>
0.530	0.148	<u>PAK2</u>	0.505	0.189	<u>H2AFZ</u>
0.529	0.148	<u>RPS12</u>	0.505	0.191	<u>ECM1</u>
0.566	0.185	<u>FAM8A1</u>	0.504	0.191	<u>ZNF32</u>
0.520	0.140	<u>PHB</u>	0.501	0.190	<u>IRAK1</u>
0.537	0.158	<u>IRF6</u>	0.511	0.216	<u>ILF2</u>
0.503	0.124	<u>MSL3</u>	0.505	0.231	<u>TRIM37</u>
0.504	0.125	<u>ANPEP</u>			
0.516	0.137	<u>POLD2</u>			
0.530	0.151	<u>STK25</u>			
0.528	0.149	<u>TMBIM6</u>			
0.561	0.182	<u>MITF</u>			
0.528	0.150	<u>SCML2</u>			
0.519	0.141	<u>GTF3C3</u>			
0.521	0.144	<u>SULT1C2</u>			

0.515	0.138	C1ORF183
0.503	0.126	<u>ERF</u>
0.534	0.157	ZNF430
0.528	0.152	<u>MTMR6</u>
0.505	0.129	<u>ETV4</u>
0.514	0.138	<u>NSDHL</u>
0.526	0.151	<u>PNPLA4</u>
0.565	0.190	C17ORF48
0.510	0.135	<u>GTF2A2</u>
0.519	0.144	<u>ACADL</u>
0.521	0.147	<u>ABCB7</u>
0.512	0.138	<u>HIP1R</u>
0.509	0.135	<u>PON3</u>
0.532	0.159	NRSN2
0.534	0.160	<u>SYBU</u>
0.513	0.140	<u>ATMIN</u>
0.519	0.146	ZKSCAN5
0.508	0.135	<u>CD55</u>
0.530	0.157	<u>SLC30A3</u>
0.540	0.167	<u>OFD1</u>
0.535	0.162	<u>RAP2C</u>
0.520	0.148	<u>TNK1</u>
0.523	0.150	<u>CUTC</u>
0.506	0.133	<u>CLCN5</u>
0.523	0.151	<u>SETD1A</u>
0.501	0.129	<u>SAV1</u>
0.505	0.134	<u>FAM86B1</u>
0.514	0.143	<u>FAM60A</u>
0.520	0.149	<u>KIAA0664L3</u>
0.521	0.150	<u>F13A1</u>
0.547	0.177	<u>CUX1</u>
0.502	0.133	<u>PLEKHM2</u>
0.519	0.151	<u>RWDD2B</u>
0.521	0.153	<u>SPINT1</u>
0.504	0.136	<u>TCL1B</u>
0.502	0.135	<u>CCNF</u>
0.523	0.156	<u>ALKBH4</u>
0.501	0.134	<u>COL21A1</u>
0.560	0.194	<u>MOK</u>
0.524	0.158	<u>SUGP2</u>
0.504	0.138	<u>IQCB1</u>
0.502	0.136	<u>DDX31</u>
0.545	0.179	<u>SLC25A24</u>
0.515	0.150	<u>CGA</u>
0.515	0.151	<u>SCAMP4</u>
0.509	0.146	<u>ABCG2</u>
0.506	0.144	<u>RPS13</u>

0.501	0.140	<u>BAHD1</u>
0.503	0.142	<u>RPH3A</u>
0.565	0.205	<u>ECM2</u>
0.531	0.171	<u>MTMR14</u>
0.502	0.142	<u>CA2</u>
0.504	0.144	<u>SNRNP40</u>
0.526	0.169	<u>SUN2</u>
0.506	0.148	<u>MAX</u>
0.536	0.179	<u>CD19</u>
0.501	0.144	<u>SCG5</u>
0.527	0.170	<u>LMF2</u>
0.503	0.147	<u>RAD23B</u>
0.512	0.155	<u>NPL</u>
0.504	0.147	<u>RUNDC3A</u>
0.511	0.155	<u>OPHN1</u>
0.507	0.153	<u>TMEM45A</u>
0.517	0.163	<u>CA11</u>
0.519	0.165	<u>PTPN2</u>
0.533	0.179	<u>MTHFS</u>
0.501	0.148	<u>SYNE2</u>
0.501	0.149	<u>TBC1D17</u>
0.514	0.163	<u>WBP2</u>
0.515	0.164	<u>C3ORF18</u>
0.508	0.158	<u>MOBP</u>
0.502	0.153	<u>RPL21</u>
0.505	0.156	<u>PGM3</u>
0.514	0.167	<u>ZNF142</u>
0.523	0.177	<u>MPZ</u>
0.532	0.186	<u>DUOX1</u>
0.505	0.159	<u>TMCO3</u>
0.511	0.167	<u>MUDENG</u>
0.517	0.173	<u>ARMC1</u>
0.524	0.180	<u>HEY2</u>
0.515	0.173	<u>KRT33A</u>
0.534	0.192	<u>NRGN</u>
0.525	0.184	<u>ZNHIT6</u>
0.509	0.168	<u>CDCP1</u>
0.518	0.177	<u>CLASP1</u>
0.514	0.174	<u>CD27</u>
0.514	0.174	<u>NBR1</u>
0.505	0.165	<u>PCDH8</u>
0.505	0.166	<u>ATG4A</u>
0.503	0.164	<u>WNT5A</u>
0.502	0.164	<u>CPT1A</u>
0.502	0.164	<u>TPRA1</u>
0.510	0.172	<u>PRSS1</u>
0.501	0.163	<u>SUCLG1</u>

0.511	0.176	<u>ALDH5A1</u>
0.518	0.183	<u>PDGFRL</u>
0.512	0.178	<u>RAB5B</u>
0.517	0.185	<u>AIM2</u>
0.501	0.169	<u>RPL13A</u>
0.511	0.180	<u>TMOD3</u>
0.502	0.171	<u>SLC16A4</u>
0.502	0.171	<u>ZFAND6</u>
0.545	0.215	<u>NTRK2</u>
0.505	0.175	<u>SCGB2A2</u>
0.508	0.180	<u>COQ9</u>
0.512	0.185	<u>FAU</u>
0.501	0.177	<u>ZNF529</u>
0.503	0.179	<u>CCDC85C</u>
0.505	0.182	<u>HLA-DOB</u>
0.505	0.184	<u>ASXL1</u>
0.501	0.181	<u>PPME1</u>
0.518	0.201	<u>RALGAPB</u>
0.501	0.183	<u>KIFC3</u>
0.505	0.193	<u>ENDOD1</u>
0.524	0.213	<u>HRASLS</u>
0.509	0.206	<u>GNL1</u>
0.508	0.212	<u>EPHB6</u>
0.501	0.213	<u>CA10</u>

Combination prediction result

<u>Name</u>	<u>Overlap count</u>	<u>Up</u>	<u>Down</u>	<u>Result</u>
<u>ARMCX5</u>	6	3	3	
<u>CHST15</u>	6	2	4	
<u>DEK</u>	6	2	4	
<u>FBXO42</u>	6	3	3	
<u>FKBP5</u>	6	3	3	
<u>GDPD5</u>	6	4	2	
<u>H2AFJ</u>	6	3	3	
<u>IVNS1ABP</u>	6	2	4	
<u>KIAA0753</u>	6	3	3	
<u>PDS5B</u>	6	4	2	
<u>PLEC</u>	6	2	4	
<u>POLI</u>	6	3	3	
<u>PTPN2</u>	6	3	3	
<u>SLC12A2</u>	6	3	3	
<u>TACC1</u>	6	4	2	
<u>TRIM33</u>	6	3	3	
<u>UBE2C</u>	6	3	3	
<u>ZNF45</u>	6	3	3	

<u>AASDHPPT</u>	5	2	3	
<u>ABHD10</u>	5	2	3	
<u>ABHD2</u>	5	3	2	
<u>ABHD3</u>	5	3	2	
<u>ANKZF1</u>	5	2	3	
<u>APPL1</u>	5	2	3	
<u>ASNA1</u>	5	3	2	
<u>ATF6</u>	5	3	2	
<u>BBX</u>	5	2	3	
<u>BCL7C</u>	5	2	3	
<u>BCLAF1</u>	5	3	2	
<u>CAT</u>	5	3	2	
<u>CBR4</u>	5	2	3	
<u>CCNO</u>	5	3	2	
<u>CEP57</u>	5	2	3	
<u>CLCN3</u>	5	2	3	
<u>CLINT1</u>	5	3	2	
<u>COQ9</u>	5	2	3	
<u>CSNK2A1</u>	5	3	2	
<u>CTSB</u>	5	2	3	
<u>DDX52</u>	5	3	2	
<u>DIO2</u>	5	2	3	
<u>DLG1</u>	5	3	2	
<u>DOCK4</u>	5	2	3	
<u>DYRK2</u>	5	2	3	
<u>EAF2</u>	5	2	3	
<u>EFNA3</u>	5	2	3	
<u>EIF5B</u>	5	2	3	
<u>EP300</u>	5	4	1	
<u>FDXR</u>	5	4	1	
<u>FHOD1</u>	5	2	3	
<u>FJX1</u>	5	2	3	
<u>FSCN1</u>	5	3	2	
<u>FTL</u>	5	2	3	
<u>G3BP2</u>	5	3	2	
<u>GABARAPL1</u>	5	3	2	
<u>GABPA</u>	5	3	2	
<u>GALNT6</u>	5	2	3	
<u>GOLGA4</u>	5	3	2	
<u>GOSR1</u>	5	2	3	
<u>GRSF1</u>	5	2	3	
<u>HIBCH</u>	5	2	3	
<u>HIST1H3G</u>	5	3	2	
<u>HSD17B1</u>	5	3	2	
<u>ID1</u>	5	4	1	
<u>IL6ST</u>	5	3	2	
<u>IVL</u>	5	3	2	
<u>KRAS</u>	5	2	3	

<u>KRT10</u>	5	3	2	
<u>KRT18</u>	5	4	1	
<u>LIAS</u>	5	2	3	
<u>MAFB</u>	5	2	3	
<u>MAP3K9</u>	5	3	2	
<u>MED6</u>	5	3	2	
<u>METTL1</u>	5	2	3	
<u>MRPS31</u>	5	2	3	
<u>MTMR4</u>	5	2	3	
<u>MUC5AC</u>	5	3	2	
<u>N4BP2L2</u>	5	2	3	
<u>NACA</u>	5	2	3	
<u>NDE1</u>	5	2	3	
<u>NFKBIL1</u>	5	2	3	
<u>NPPB</u>	5	3	2	
<u>NR3C1</u>	5	2	3	
<u>NUBP1</u>	5	2	3	
<u>OAS1</u>	5	2	3	
<u>OPA1</u>	5	2	3	
<u>PCBP2</u>	5	2	3	
<u>PEX13</u>	5	3	2	
<u>PLAU</u>	5	3	2	
<u>PLSCR1</u>	5	2	3	
<u>PPME1</u>	5	3	2	
<u>PRPH</u>	5	3	2	
<u>PSMD3</u>	5	2	3	
<u>RAB2A</u>	5	2	3	
<u>RANGAP1</u>	5	3	2	
<u>RAPGEF2</u>	5	3	2	
<u>RBM12B</u>	5	2	3	
<u>RGS10</u>	5	3	2	
<u>RIT1</u>	5	3	2	
<u>RNF6</u>	5	2	3	
<u>SAFB2</u>	5	3	2	
<u>SAP30</u>	5	2	3	
<u>SF3A1</u>	5	3	2	
<u>SFTPC</u>	5	3	2	
<u>SIDT1</u>	5	3	2	
<u>SLC25A37</u>	5	2	3	
<u>SLC39A4</u>	5	3	2	
<u>SLC39A8</u>	5	3	2	
<u>SMCHD1</u>	5	2	3	
<u>SPATA5L1</u>	5	2	3	
<u>SREK1</u>	5	3	2	
<u>SSH1</u>	5	2	3	
<u>STK17A</u>	5	3	2	
<u>STK39</u>	5	2	3	
<u>STRN3</u>	5	3	2	

<u>TBC1D1</u>	5	3	2	
<u>THBS1</u>	5	3	2	
<u>TIPRL</u>	5	2	3	
<u>TLK1</u>	5	2	3	
<u>TMPRSS2</u>	5	4	1	
<u>TNFRSF1A</u>	5	3	2	
<u>TOPORS</u>	5	3	2	
<u>TPRA1</u>	5	3	2	
<u>TTI1</u>	5	2	3	
<u>TUBA4A</u>	5	3	2	
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<u>ATP6V1A</u>	3	1	2	
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ZXDB	2	2	0	
ZZZ3	2	2	0	

Complex 3

mRNA based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.739	0.052	<u>TRAF5</u>	0.935	0.006	<u>PGR</u>
0.656	0.037	<u>CYP11A1</u>	0.932	0.008	<u>TFF1</u>
0.677	0.107	<u>TPM1</u>	0.774	0.006	<u>CYP19A1</u>
0.629	0.109	<u>ADORA2B</u>	0.711	0.003	<u>RARG</u>
0.629	0.109	<u>CDCA4</u>	0.670	0.084	<u>SFRP1</u>
0.629	0.109	<u>CENPJ</u>	0.587	0.005	<u>CYP26A1</u>
0.629	0.109	<u>DNAJC9</u>	0.571	0.030	<u>COX5B</u>
0.629	0.109	<u>DONSON</u>	0.614	0.089	<u>KRT6A</u>
0.629	0.109	<u>HAUS8</u>	0.628	0.106	<u>UGT2B15</u>
0.629	0.109	<u>MCMBP</u>	0.629	0.109	<u>PFKFB2</u>
0.629	0.109	<u>NUP155</u>	0.629	0.109	<u>SH3BGRL</u>
0.629	0.109	<u>PARP2</u>	0.629	0.109	<u>TRIM13</u>
0.629	0.109	<u>RMI1</u>	0.615	0.095	<u>SOLE</u>
0.629	0.109	<u>SCARA3</u>	0.611	0.140	<u>GFRA1</u>
0.629	0.109	<u>SLC16A14</u>	0.516	0.059	<u>PSMD6</u>
0.629	0.109	<u>SUV39H2</u>	0.548	0.092	<u>CALM1</u>
0.606	0.124	<u>GSS</u>	0.566	0.129	<u>ST3GAL1</u>
0.595	0.131	<u>RPRM</u>	0.542	0.125	<u>CYTH1</u>
0.564	0.116	<u>CXCR7</u>	0.529	0.137	<u>CACNG4</u>
0.543	0.107	<u>ABCC5</u>	0.529	0.137	<u>CHRNE</u>
0.536	0.115	<u>TNIK</u>	0.519	0.128	<u>PTGER4</u>
0.546	0.139	<u>MFAP4</u>	0.546	0.157	<u>ALDOA</u>
0.522	0.118	<u>TBL1XR1</u>	0.537	0.163	<u>HIVEP1</u>
0.543	0.162	<u>PLEC</u>	0.505	0.152	<u>FADS1</u>
0.504	0.139	<u>NSF</u>	0.502	0.154	<u>EXOSC4</u>
0.537	0.172	<u>ERCC2</u>			
0.534	0.193	<u>CXCL2</u>			
0.507	0.191	<u>CAPRIN1</u>			
0.538	0.226	<u>TBC1D9</u>			

Protein based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.769	0.005	<u>IFNG</u>	0.807	0.004	<u>CYP3A4</u>
0.519	0.145	<u>VIM</u>	0.804	0.005	<u>CYP3A7</u>
0.528	0.186	<u>PPARA</u>	0.758	0.003	<u>CYP2B6</u>
			0.561	0.122	<u>CD83</u>

MCF7 based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.621	0.026	<u>BBS4</u>	0.687	0.025	<u>STRN</u>

0.589	0.037	<u>MRPL34</u>	0.694	0.035	<u>CDKN1B</u>
0.620	0.088	<u>FOXMI</u>	0.699	0.042	<u>C11orf68</u>
0.536	0.046	<u>ACVR2B</u>	0.667	0.051	<u>ZNF672</u>
0.536	0.046	<u>BID</u>	0.651	0.119	<u>CLDN9</u>
0.536	0.046	<u>ERGIC2</u>	0.617	0.087	<u>KIAA0430</u>
0.517	0.033	<u>MREG</u>	0.628	0.109	<u>CLCF1</u>
0.582	0.101	<u>SBF1</u>	0.542	0.026	<u>PHLPP1</u>
0.532	0.054	<u>H2AFJ</u>	0.557	0.051	<u>SCAND2P</u>
0.537	0.097	<u>SFN</u>	0.519	0.022	<u>ANGEL2</u>
0.518	0.117	<u>SUCO</u>	0.602	0.108	<u>BIN1</u>
			0.536	0.046	<u>ALAD</u>
			0.536	0.046	<u>CLEC16A</u>
			0.536	0.046	<u>FBXL18</u>
			0.536	0.046	<u>ZC2HC1A</u>
			0.532	0.046	<u>ZNF200</u>
			0.545	0.063	<u>RAB3A</u>
			0.510	0.029	<u>MTUS1</u>
			0.510	0.031	<u>MARCH8</u>
			0.510	0.031	<u>WIP12</u>
			0.551	0.076	<u>STX3</u>
			0.570	0.101	<u>RANGAP1</u>
			0.508	0.060	<u>MINOS1P1</u>
			0.556	0.109	<u>FOXC1</u>
			0.528	0.084	<u>CBR3</u>
			0.511	0.072	<u>PIK3IP1</u>
			0.517	0.083	<u>LYPD3</u>
			0.508	0.075	<u>GCLC</u>
			0.553	0.120	<u>KIAA0232</u>
			0.518	0.099	<u>TRIM23</u>
			0.502	0.117	<u>PIGA</u>

VCAP_6h based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.995	0.001	<u>SIN3B</u>	0.997	0.003	<u>OXSRI</u>
0.996	0.004	<u>TUBB6</u>	0.996	0.003	<u>PIK3R3</u>
0.768	0.043	<u>ZNF221</u>	0.996	0.003	<u>AMDHD2</u>
0.687	0.027	<u>HP</u>	0.506	0.040	<u>ABCF3</u>
0.581	0.155	<u>CETP</u>	0.547	0.089	<u>CBR3</u>
0.540	0.129	<u>OXT</u>	0.536	0.180	<u>C1ORF216</u>
0.519	0.169	<u>NUBP1</u>	0.507	0.158	<u>BABAM1</u>

VCAP_24h based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.997	0.001	<u>STX10</u>	0.997	0.001	<u>EPHX2</u>
0.997	0.001	<u>TMEM2</u>	0.997	0.001	<u>CLDN7</u>

0.997	0.001	<u>FLAD1</u>	0.997	0.001	<u>CLDN3</u>
0.996	0.001	<u>ABCG1</u>	0.997	0.001	<u>IGLV1-40</u>
0.996	0.002	<u>LSM7</u>	0.997	0.001	<u>C2</u>
0.997	0.002	<u>TERF2IP</u>	0.997	0.002	<u>IGKV3-20</u>
0.996	0.002	<u>EDF1</u>	0.997	0.002	<u>CD7</u>
0.997	0.003	<u>SMC3</u>	0.997	0.001	<u>KIAA0664L3</u>
0.997	0.003	<u>SKIV2L</u>	0.997	0.002	<u>COL6A3</u>
0.996	0.003	<u>STK25</u>	0.997	0.002	<u>TRAT1</u>
0.996	0.003	<u>CSNK1A1</u>	0.997	0.002	<u>SIVA1</u>
0.994	0.001	<u>ODAM</u>	0.997	0.002	<u>IGKV1-5</u>
0.994	0.001	<u>GABPB1</u>	0.997	0.002	<u>IL1R1</u>
0.996	0.003	<u>PSME2</u>	0.997	0.002	<u>TCF25</u>
0.993	0.001	<u>PGRMC2</u>	0.997	0.002	<u>SLC4A4</u>
0.555	0.110	<u>COL9A3</u>	0.997	0.002	<u>NR4A1</u>
0.525	0.106	<u>CD96</u>	0.997	0.002	<u>FBXL12</u>
			0.996	0.002	<u>ARPP21</u>
			0.997	0.002	<u>PLP2</u>
			0.996	0.002	<u>GLUL</u>
			0.997	0.003	<u>RPA2</u>
			0.995	0.001	<u>GMFB</u>
			0.995	0.001	<u>RPP14</u>
			0.997	0.003	<u>PRKAG2</u>
			0.995	0.001	<u>SPOCK2</u>
			0.995	0.002	<u>CD3G</u>
			0.996	0.003	<u>COL11A1</u>
			0.996	0.003	<u>PHKB</u>
			0.992	0.001	<u>PID1</u>
			0.521	0.101	<u>HOMER2</u>

Combination prediction result

<u>Name</u>	<u>Overlap count</u>	<u>Up</u>	<u>Down</u>	<u>Result</u>
<u>CBR3</u>	3	3	0	
<u>CDCA4</u>	3	2	1	
<u>CRBN</u>	3	1	2	
<u>CTSB</u>	3	1	2	
<u>DCAF17</u>	3	1	2	
<u>ELAVL1</u>	3	1	2	
<u>FKBP5</u>	3	3	0	
<u>GALNT6</u>	3	1	2	
<u>PDZK1</u>	3	1	2	
<u>RETSAT</u>	3	1	2	
<u>STK39</u>	3	1	2	
<u>UBE2C</u>	3	2	1	
<u>ZNF302</u>	3	2	1	
<u>AHCY</u>	2	2	0	
<u>AK2</u>	2	0	2	

<u>ANXA1</u>	2	0	2	
<u>C8ORF4</u>	2	2	0	
<u>CCR7</u>	2	0	2	
<u>CEACAM6</u>	2	0	2	
<u>CEP70</u>	2	0	2	
<u>CETP</u>	2	0	2	
<u>CHFR</u>	2	2	0	
<u>CHIC2</u>	2	2	0	
<u>CHST15</u>	2	0	2	
<u>CLCN2</u>	2	0	2	
<u>CLIC3</u>	2	0	2	
<u>DENND5B</u>	2	0	2	
<u>DIAPH2</u>	2	0	2	
<u>DLD</u>	2	2	0	
<u>DSE</u>	2	0	2	
<u>EHHADH</u>	2	0	2	
<u>ETAA1</u>	2	0	2	
<u>ETFB</u>	2	2	0	
<u>FBXL12</u>	2	2	0	
<u>FLAD1</u>	2	0	2	
<u>FNDC3B</u>	2	0	2	
<u>FOXD1</u>	2	2	0	
<u>GGH</u>	2	2	0	
<u>GJA1</u>	2	0	2	
<u>GNMT</u>	2	2	0	
<u>GPR19</u>	2	0	2	
<u>GPR20</u>	2	0	2	
<u>HIVEP1</u>	2	2	0	
<u>HMOX1</u>	2	2	0	
<u>ID1</u>	2	2	0	
<u>IER3</u>	2	0	2	
<u>IFIT1</u>	2	2	0	
<u>IKBKAP</u>	2	0	2	
<u>ITGB8</u>	2	0	2	
<u>KLF11</u>	2	0	2	
<u>KRT3</u>	2	0	2	
<u>LAMTOR2</u>	2	2	0	
<u>MAP3K5</u>	2	0	2	
<u>MAST4</u>	2	0	2	
<u>MCMBP</u>	2	0	2	
<u>MDM2</u>	2	0	2	
<u>MEAF6</u>	2	2	0	
<u>NOS2</u>	2	0	2	
<u>NR4A1</u>	2	2	0	
<u>ODF1</u>	2	0	2	
<u>PCMTD2</u>	2	0	2	
<u>PDK4</u>	2	0	2	
<u>PDS5B</u>	2	2	0	

<u>PIK3R3</u>	2	2	0	
<u>PLEC</u>	2	0	2	
<u>POLI</u>	2	0	2	
<u>PRDX6</u>	2	2	0	
<u>RARG</u>	2	2	0	
<u>RBM12</u>	2	0	2	
<u>REG1B</u>	2	0	2	
<u>ROBO4</u>	2	0	2	
<u>RPP14</u>	2	2	0	
<u>SECISBP2</u>	2	0	2	
<u>SELL</u>	2	0	2	
<u>SH3D21</u>	2	0	2	
<u>SLC25A37</u>	2	0	2	
<u>SLC4A8</u>	2	0	2	
<u>SLC6A4</u>	2	0	2	
<u>SPATA20</u>	2	2	0	
<u>SPOP</u>	2	2	0	
<u>SPR</u>	2	2	0	
<u>STK3</u>	2	2	0	
<u>SUV39H2</u>	2	0	2	
<u>TCF25</u>	2	2	0	
<u>TLR2</u>	2	0	2	
<u>TMPRSS2</u>	2	2	0	
<u>TOP1</u>	2	2	0	
<u>TPSB2</u>	2	0	2	
<u>TRIM13</u>	2	2	0	
<u>TSKU</u>	2	2	0	
<u>TSPAN5</u>	2	0	2	
<u>VAV3</u>	2	0	2	
<u>VIM</u>	2	0	2	
<u>WISP2</u>	2	2	0	
ZBTB39	2	0	2	
<u>ZFP30</u>	2	0	2	

Complex 4

mRNA based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.903	0.001	<u>CYP2S1</u>	0.707	0.077	<u>SFRP1</u>
0.795	0.030	<u>NSF</u>	0.567	0.107	<u>SOLE</u>
0.696	0.067	<u>TRAF5</u>	0.583	0.123	<u>PFKFB2</u>
0.625	0.132	<u>TPM1</u>	0.583	0.123	<u>SH3BGRL</u>
0.558	0.096	<u>ABCC5</u>	0.583	0.123	<u>TRIM13</u>
0.583	0.123	<u>ADORA2B</u>	0.508	0.118	<u>CALM1</u>
0.583	0.123	<u>CDCA4</u>	0.525	0.187	<u>UGT2B15</u>
0.583	0.123	<u>CENPJ</u>			
0.583	0.123	<u>DNAJC9</u>			
0.583	0.123	<u>DONSON</u>			
0.583	0.123	<u>HAUS8</u>			
0.583	0.123	<u>MCMBP</u>			
0.583	0.123	<u>NUP155</u>			
0.583	0.123	<u>PARP2</u>			
0.583	0.123	<u>RMI1</u>			
0.583	0.123	<u>SCARA3</u>			
0.583	0.123	<u>SLC16A14</u>			
0.583	0.123	<u>SUV39H2</u>			
0.562	0.145	<u>GSS</u>			

Protein based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.859	0.001	<u>PR0.859)KCA</u>	0.585	0.103	<u>CD83</u>

MCF7 based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.562	0.042	<u>BBS4</u>	0.897	0.010	<u>LPIN1</u>
0.505	0.095	<u>MRPL34</u>	0.870	0.015	<u>BNIP3L</u>
0.501	0.158	<u>SBF1</u>	0.720	0.004	<u>MAFB</u>
			0.687	0.036	<u>PLA2G3</u>
			0.629	0.046	<u>KLHL24</u>
			0.628	0.046	<u>STRN</u>
			0.635	0.059	<u>CDKN1B</u>
			0.598	0.056	<u>SOLE</u>
			0.581	0.073	<u>HMGCS1</u>
			0.600	0.094	<u>KIAA0430</u>
			0.581	0.076	<u>CCNG2</u>
			0.532	0.039	<u>EGR3</u>
			0.542	0.062	<u>ALDOC</u>

	0.565	0.086	<u>C11orf68</u>
	0.568	0.094	<u>ZNF672</u>
	0.510	0.038	<u>SPRED2</u>
	0.616	0.149	<u>CLDN9</u>
	0.511	0.068	<u>WIP1</u>
	0.501	0.060	<u>EIF2AK3</u>

VCAP_6h based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.991	0.003	<u>PPAN</u>	0.990	0.004	<u>ACADL</u>
0.990	0.003	<u>DBN1</u>	0.989	0.004	<u>FBXO21</u>
0.990	0.004	<u>WIZ</u>	0.988	0.004	<u>ETNK2</u>
0.988	0.005	<u>SOX4</u>	0.986	0.003	<u>KCTD9</u>
0.987	0.004	<u>NDUFA10</u>	0.987	0.004	<u>CCRL1</u>
0.988	0.005	<u>MLL4</u>	0.986	0.005	<u>MTFR1</u>
0.987	0.005	<u>CIZ1</u>	0.985	0.003	<u>SUMO2</u>
0.987	0.004	<u>ARMC6</u>	0.985	0.004	<u>ECM2</u>
0.987	0.004	<u>SCAMP1</u>	0.984	0.004	<u>GPR19</u>
0.987	0.004	<u>TMEM97</u>	0.984	0.004	<u>GMEB2</u>
0.987	0.004	<u>PEBP1</u>	0.983	0.004	<u>DERL1</u>
0.984	0.002	<u>KLHL21</u>	0.983	0.005	<u>APBA2</u>
0.985	0.003	<u>CGREF1</u>	0.983	0.004	<u>FZD5</u>
0.986	0.005	<u>RAD9A</u>	0.983	0.005	<u>DYNC1I1</u>
0.984	0.005	<u>PHGDH</u>	0.981	0.003	<u>MTO1</u>
0.984	0.005	<u>MRPS27</u>	0.982	0.004	<u>AIP</u>
0.982	0.003	<u>PTGER2</u>	0.981	0.004	<u>YWHAQ</u>
0.983	0.004	<u>PKN1</u>	0.982	0.005	<u>CARD9</u>
0.983	0.004	<u>ZDHHC4</u>	0.981	0.004	<u>NFE2L1</u>
0.981	0.003	<u>INO80B</u>	0.981	0.004	<u>PGM3</u>
0.982	0.004	<u>UPF3A</u>	0.981	0.004	<u>DNAJA2</u>
0.982	0.004	<u>ATP13A1</u>	0.981	0.005	<u>ARMCX3</u>
0.982	0.004	<u>PTPN2</u>	0.981	0.005	<u>TRAPPC6A</u>
0.980	0.004	<u>EPHB2</u>	0.981	0.005	<u>SNAP23</u>
0.981	0.005	<u>AKAP17A</u>	0.980	0.005	<u>GSDMB</u>
0.980	0.004	<u>BBX</u>	0.980	0.005	<u>SOCS2</u>
0.981	0.004	<u>CNPPD1</u>	0.980	0.005	<u>ARF6</u>
0.980	0.004	<u>TNFSF13</u>	0.978	0.003	<u>SLC38A2</u>
0.980	0.005	<u>TECR</u>	0.978	0.004	<u>RAP1B</u>
0.980	0.004	<u>ATAD3A</u>	0.979	0.004	<u>TYROBP</u>
0.980	0.004	<u>MAGED1</u>	0.979	0.005	<u>LPP</u>
0.980	0.004	<u>MPST</u>	0.978	0.005	<u>IPO13</u>
0.978	0.003	<u>MGC12488</u>	0.979	0.005	<u>SLCO2A1</u>
0.978	0.003	<u>LZTFL1</u>	0.978	0.005	<u>NCAPD2</u>
0.979	0.004	<u>B4GALT2</u>	0.978	0.004	<u>SORD</u>
0.978	0.004	<u>PTER</u>	0.977	0.004	<u>CYB5R4</u>
0.979	0.004	<u>LYRM4</u>	0.978	0.005	<u>KLF9</u>

0.978	0.004	<u>GORASP1</u>	0.978	0.004	<u>UBE2H</u>
0.978	0.004	<u>ALDH18A1</u>	0.977	0.003	<u>HERC2</u>
0.978	0.003	<u>AMFR</u>	0.977	0.004	<u>TMEM176B</u>
0.978	0.004	<u>IKBKB</u>	0.977	0.004	<u>RTN1</u>
0.978	0.004	<u>DNMT3B</u>	0.977	0.005	<u>TPPP3</u>
0.978	0.005	<u>KIAA0494</u>	0.977	0.005	<u>HSD17B6</u>
0.976	0.004	<u>ATP1B3</u>	0.976	0.004	<u>LIFR</u>
0.976	0.003	<u>TUBG2</u>	0.977	0.005	<u>MS4A4A</u>
0.977	0.005	<u>TM7SF2</u>	0.976	0.004	<u>KCTD15</u>
0.977	0.004	<u>YIPF2</u>	0.976	0.004	<u>ARAP3</u>
0.977	0.004	<u>FUT7</u>	0.976	0.005	<u>CORO2A</u>
0.976	0.005	<u>SORBS3</u>	0.976	0.005	<u>PEA15</u>
0.976	0.005	<u>C14ORF1</u>	0.975	0.004	<u>CST1</u>
0.974	0.003	<u>NDP</u>	0.976	0.005	<u>MORC3</u>
0.975	0.004	<u>SNAPC2</u>	0.975	0.004	<u>PTPN9</u>
0.975	0.004	<u>LEPROT</u>	0.976	0.005	<u>ANXA1</u>
0.975	0.004	<u>PARP4</u>	0.975	0.004	<u>SNAI2</u>
0.976	0.005	<u>WSB1</u>	0.976	0.005	<u>SMYD2</u>
0.976	0.005	<u>MRPL24</u>	0.976	0.005	<u>OAT</u>
0.975	0.005	<u>LTBP3</u>	0.975	0.005	<u>MOB3B</u>
0.973	0.003	<u>BACH2</u>	0.976	0.005	<u>MORF4L2</u>
0.974	0.004	<u>ESRRG</u>	0.975	0.005	<u>LAP3</u>
0.975	0.005	<u>RABAC1</u>	0.975	0.005	<u>EPS15</u>
0.974	0.004	<u>PRRC2B</u>	0.975	0.005	<u>STK17B</u>
0.974	0.004	<u>MRPL17</u>	0.975	0.005	<u>KIAA0930</u>
0.974	0.005	<u>ATP9A</u>	0.975	0.005	<u>CDH5</u>
0.974	0.004	<u>PWP2</u>	0.975	0.005	<u>PDLIM1</u>
0.973	0.004	<u>INPPL1</u>	0.977	0.008	<u>MIOS</u>
0.973	0.005	<u>RPL36</u>	0.974	0.004	<u>RNF115</u>
0.973	0.005	<u>NOLC1</u>	0.975	0.005	<u>USP15</u>
0.971	0.003	<u>GALNT10</u>	0.974	0.005	<u>ANPEP</u>
0.970	0.003	<u>ABCB8</u>	0.974	0.005	<u>PPEF1</u>
0.970	0.003	<u>EFNA3</u>	0.972	0.003	<u>NDUFB11</u>
0.971	0.004	<u>WDR46</u>	0.973	0.005	<u>CAST</u>
0.972	0.005	<u>MRPS31</u>	0.973	0.005	<u>PHOX2A</u>
0.969	0.003	<u>ADAM15</u>	0.973	0.005	<u>CLEC7A</u>
0.971	0.005	<u>LEPREL4</u>	0.973	0.004	<u>GSK3B</u>
0.971	0.005	<u>NAA15</u>	0.972	0.005	<u>G3BP2</u>
0.969	0.003	<u>MRPL52</u>	0.973	0.005	<u>MNDA</u>
0.970	0.004	<u>HMGA1</u>	0.973	0.005	<u>MMP9</u>
0.970	0.004	<u>RPL11</u>	0.972	0.005	<u>RGS16</u>
0.970	0.004	<u>BBC3</u>	0.972	0.004	<u>CD2AP</u>
0.971	0.005	<u>SMARCE1</u>	0.971	0.004	<u>OLFML2A</u>
0.970	0.005	<u>IP6K2</u>	0.971	0.004	<u>NCAPD3</u>
0.970	0.004	<u>RRNAD1</u>	0.971	0.005	<u>FAM189A2</u>
0.969	0.004	<u>COX15</u>	0.971	0.005	<u>CNOT8</u>
0.970	0.005	<u>CDC37</u>	0.971	0.005	<u>TRAPPC2</u>

0.969	0.003	<u>ECM2</u>	0.971	0.005	<u>RTF1</u>
0.969	0.005	<u>BRD2</u>	0.971	0.005	<u>PALLD</u>
0.968	0.004	<u>TLE3</u>	0.971	0.005	<u>ALKBH1</u>
0.968	0.005	<u>SREBF1</u>	0.971	0.005	<u>ZNF394</u>
0.968	0.005	<u>GALNT11</u>	0.970	0.005	<u>GPNMB</u>
0.968	0.005	<u>RANGAP1</u>	0.970	0.005	<u>TMEM204</u>
0.967	0.005	<u>IMPDH2</u>	0.970	0.004	<u>CREB5</u>
0.967	0.004	<u>RUFY2</u>	0.970	0.005	<u>CTRC</u>
0.967	0.005	<u>OAS1</u>	0.969	0.004	<u>UBE2G1</u>
0.966	0.004	<u>CAD</u>	0.970	0.005	<u>CPEB3</u>
0.966	0.004	<u>C9ORF91</u>	0.970	0.005	<u>FGD6</u>
0.965	0.003	<u>RPAP1</u>	0.970	0.005	<u>RBX1</u>
0.965	0.004	<u>TRAF3</u>	0.970	0.005	<u>FOXF2</u>
0.968	0.007	<u>FAM162A</u>	0.968	0.003	<u>ST18</u>
0.966	0.005	<u>KIAA0368</u>	0.969	0.005	<u>FAM127B</u>
0.966	0.005	<u>YIF1A</u>	0.969	0.005	<u>PSMC2</u>
0.965	0.005	<u>HTRA2</u>	0.968	0.004	<u>SLC37A1</u>
0.965	0.005	<u>U2AF1</u>	0.968	0.005	<u>SMAP1</u>
0.964	0.004	<u>RPH3AL</u>	0.969	0.005	<u>PLA2G7</u>
0.965	0.005	<u>PREP</u>	0.968	0.005	<u>CFI</u>
0.965	0.005	<u>GAR1</u>	0.968	0.005	<u>IGSF6</u>
0.964	0.004	<u>DNASE2</u>	0.968	0.005	<u>IL10RA</u>
0.964	0.004	<u>GDF2</u>	0.968	0.005	<u>TOMM22</u>
0.962	0.003	<u>APOBEC3F</u>	0.966	0.002	<u>FUBP3</u>
0.963	0.004	<u>FAM134C</u>	0.967	0.005	<u>LDB2</u>
0.963	0.004	<u>PNPLA6</u>	0.967	0.005	<u>C5ORF44</u>
0.963	0.004	<u>SPP1</u>	0.967	0.005	<u>RAPGEF5</u>
0.963	0.005	<u>ALG3</u>	0.966	0.004	<u>SALL2</u>
0.963	0.004	<u>FAM30A</u>	0.969	0.007	<u>BCL2L13</u>
0.967	0.008	<u>MLEC</u>	0.972	0.011	<u>EDEM3</u>
0.962	0.004	<u>PEMT</u>	0.966	0.005	<u>LOC100507397</u>
0.962	0.005	<u>SLC30A1</u>	0.965	0.004	<u>NUP153</u>
0.962	0.004	<u>FOXO4</u>	0.965	0.005	<u>PRLH</u>
0.961	0.004	<u>RPL6</u>	0.965	0.005	<u>NEK2</u>
0.960	0.003	<u>CES1P1</u>	0.965	0.005	<u>DDX3X</u>
0.961	0.005	<u>MECR</u>	0.964	0.004	<u>CSRP2</u>
0.960	0.005	<u>LEF1</u>	0.963	0.004	<u>BNIP2</u>
0.960	0.004	<u>PITRM1</u>	0.964	0.005	<u>DDX19A</u>
0.962	0.006	<u>PSD3</u>	0.964	0.005	<u>CLEC4A</u>
0.961	0.006	<u>DALRD3</u>	0.963	0.004	<u>C18ORF8</u>
0.959	0.005	<u>VCP</u>	0.961	0.004	<u>ZNF189</u>
0.958	0.005	<u>COL5A1</u>	0.967	0.010	<u>CYB561</u>
0.959	0.006	<u>PRKCSH</u>	0.961	0.005	<u>PNOC</u>
0.958	0.005	<u>TERF1</u>	0.961	0.005	<u>INTS7</u>
0.958	0.005	<u>EHMT2</u>	0.961	0.005	<u>FGL2</u>
0.957	0.004	<u>GMDS</u>	0.961	0.005	<u>ZNF137P</u>
0.957	0.005	<u>C9ORF40</u>	0.960	0.004	<u>CHMP2B</u>

0.954	0.003	<u>TMEM214</u>	0.959	0.005	<u>PTPRO</u>
0.959	0.008	<u>RIC8A</u>	0.959	0.005	<u>HNRNPC</u>
0.962	0.012	<u>SRSF1</u>	0.959	0.005	<u>TMEM176A</u>
0.953	0.004	<u>THADA</u>	0.959	0.005	<u>COPS2</u>
0.954	0.005	<u>POLD2</u>	0.959	0.005	<u>CHN2</u>
0.952	0.003	<u>RAB11FIP5</u>	0.958	0.004	<u>C1ORF115</u>
0.952	0.006	<u>TSEN34</u>	0.958	0.005	<u>NDUFA6</u>
0.955	0.009	<u>EXOSC10</u>	0.958	0.005	<u>CREBL2</u>
0.952	0.007	<u>SRSF11</u>	0.958	0.006	<u>RAC3</u>
0.948	0.004	<u>PDCD6IP</u>	0.959	0.006	<u>TGM4</u>
0.948	0.005	<u>ST7</u>	0.957	0.005	<u>CES2</u>
0.947	0.006	<u>NKTR</u>	0.957	0.005	<u>C1ORF21</u>
0.945	0.005	<u>EHD1</u>	0.957	0.004	<u>UBE2D3</u>
0.944	0.004	<u>OXSM</u>	0.957	0.005	<u>PPP1R16B</u>
0.944	0.004	<u>ARHGEF1</u>	0.954	0.003	<u>SNX10</u>
0.956	0.016	<u>C21ORF33</u>	0.955	0.005	<u>SUMO1</u>
0.943	0.005	<u>KRR1</u>	0.954	0.005	<u>WLS</u>
0.947	0.009	<u>SRSF7</u>	0.954	0.005	<u>KIAA1462</u>
0.942	0.005	<u>NIT2</u>	0.953	0.004	<u>CDCP1</u>
0.942	0.005	<u>METTL21D</u>	0.953	0.005	<u>WARS</u>
0.943	0.008	<u>TSPAN4</u>	0.953	0.005	<u>SLC27A3</u>
0.953	0.018	<u>RHEB</u>	0.952	0.005	<u>CYTIP</u>
0.938	0.005	<u>TLE6</u>	0.956	0.009	<u>TM6SF1</u>
0.938	0.005	<u>UBE2C</u>	0.956	0.010	<u>ANAPC10</u>
0.934	0.004	<u>SETD5</u>	0.954	0.008	<u>CFD</u>
0.940	0.010	<u>IP6K1</u>	0.956	0.010	<u>USP10</u>
0.935	0.005	<u>EIF3E</u>	0.951	0.005	<u>SNX16</u>
0.934	0.004	<u>CRYL1</u>	0.949	0.005	<u>SEMG1</u>
0.939	0.009	<u>GAA</u>	0.949	0.006	<u>HYI</u>
0.937	0.008	<u>C10ORF2</u>	0.952	0.009	<u>WDR44</u>
0.939	0.013	<u>C12ORF10</u>	0.949	0.006	<u>TBPL1</u>
0.934	0.010	<u>H2BFS</u>	0.949	0.007	<u>SLC5A6</u>
0.932	0.009	<u>GORASP2</u>	0.945	0.004	<u>SCGB1D2</u>
0.929	0.006	<u>TBL3</u>	0.949	0.008	<u>CCNH</u>
0.931	0.009	<u>RUVBL2</u>	0.947	0.008	<u>PCGF3</u>
0.929	0.008	<u>ILK</u>	0.945	0.006	<u>ELF2</u>
0.926	0.006	<u>STRN4</u>	0.944	0.005	<u>TRIM22</u>
0.924	0.005	<u>AFG3L2</u>	0.943	0.004	<u>PGAM2</u>
0.923	0.005	<u>NPAS1</u>	0.943	0.005	<u>SERPINI2</u>
0.924	0.009	<u>EEF1B2</u>	0.945	0.008	<u>RANBP10</u>
0.919	0.004	<u>NELF</u>	0.948	0.011	<u>SH3BP5</u>
0.924	0.010	<u>GPD1L</u>	0.942	0.005	<u>HPSE</u>
0.925	0.012	<u>CD151</u>	0.942	0.006	<u>STAM</u>
0.921	0.008	<u>SEC61A1</u>	0.940	0.005	<u>NFKBIL1</u>
0.932	0.020	<u>SH3GLB2</u>	0.943	0.008	<u>ITGA8</u>
0.927	0.015	<u>NHP2</u>	0.939	0.005	<u>ITM2B</u>
0.925	0.013	<u>DEAF1</u>	0.937	0.005	<u>SEPT10</u>

0.920	0.009	<u>COBRA1</u>	0.941	0.009	<u>FAM198B</u>
0.919	0.008	<u>LYPD1</u>	0.943	0.013	<u>PRPF4B</u>
0.933	0.023	<u>KAZN</u>	0.932	0.005	<u>KCNJ8</u>
0.921	0.013	<u>PPP3CB</u>	0.931	0.005	<u>KATNB1</u>
0.919	0.012	<u>UBE2M</u>	0.932	0.007	<u>UBE2N</u>
0.917	0.011	<u>AK2</u>	0.934	0.010	<u>ZNF22</u>
0.915	0.013	<u>ACTR2</u>	0.931	0.007	<u>C4ORF41</u>
0.911	0.009	<u>PPP1CA</u>	0.933	0.010	<u>SLC4A4</u>
0.909	0.008	<u>SRPRB</u>	0.930	0.007	<u>CD93</u>
0.906	0.006	<u>GNB5</u>	0.933	0.012	<u>CPA2</u>
0.909	0.010	<u>SDAD1</u>	0.931	0.012	<u>SH3GLB1</u>
0.904	0.005	<u>WDR48</u>	0.934	0.015	<u>NEDD9</u>
0.901	0.004	<u>ARMCX6</u>	0.922	0.006	<u>APOLD1</u>
0.907	0.011	<u>HEXIM1</u>	0.924	0.008	<u>SPG11</u>
0.909	0.015	<u>FBXO7</u>	0.926	0.011	<u>MARK4</u>
0.900	0.005	<u>LUC7L2</u>	0.920	0.005	<u>GDF2</u>
0.906	0.012	<u>HSD17B10</u>	0.923	0.009	<u>CSTF2T</u>
0.909	0.016	<u>KIF2C</u>	0.923	0.009	<u>BHLHB9</u>
0.901	0.013	<u>FAM57A</u>	0.920	0.010	<u>CAV1</u>
0.910	0.024	<u>ATP6V0E1</u>	0.921	0.012	<u>FOXF1</u>
0.901	0.016	<u>EEF1G</u>	0.923	0.015	<u>CDH1</u>
0.892	0.007	<u>SEC24A</u>	0.920	0.012	<u>LRRC16A</u>
0.902	0.018	<u>NGFRAP1</u>	0.920	0.013	<u>FILIP1L</u>
0.899	0.018	<u>C19ORF22</u>	0.921	0.014	<u>HNRNPD</u>
0.895	0.020	<u>NDUFV1</u>	0.920	0.014	<u>AOAH</u>
0.881	0.007	<u>RPL35</u>	0.916	0.010	<u>ATG5</u>
0.886	0.011	<u>SAC3D1</u>	0.911	0.006	<u>YWHAZ</u>
0.887	0.013	<u>ZNF302</u>	0.919	0.015	<u>UBR2</u>
0.897	0.025	<u>SLC35E1</u>	0.909	0.008	<u>VWA1</u>
0.883	0.015	<u>RSAD1</u>	0.912	0.011	<u>EDC3</u>
0.885	0.018	<u>MLST8</u>	0.906	0.006	<u>WDR45L</u>
0.877	0.010	<u>RUFY1</u>	0.908	0.008	<u>SPDEF</u>
0.898	0.032	<u>RCC1</u>	0.907	0.009	<u>LGI1</u>
0.881	0.018	<u>CHD1L</u>	0.904	0.008	<u>LPPR4</u>
0.882	0.019	<u>DNPEP</u>	0.903	0.008	<u>CREB3L1</u>
0.880	0.018	<u>ATP5G1</u>	0.900	0.005	<u>NIT1</u>
0.878	0.018	<u>LSM4</u>	0.900	0.005	<u>KIAA1324</u>
0.877	0.021	<u>FAM50A</u>	0.904	0.009	<u>KAL1</u>
0.873	0.017	<u>BANF1</u>	0.909	0.014	<u>KRI1</u>
0.877	0.022	<u>PLOD3</u>	0.907	0.015	<u>GTSE1</u>
0.873	0.018	<u>HSPBP1</u>	0.899	0.008	<u>CD300C</u>
0.864	0.011	<u>C2CD2</u>	0.900	0.010	<u>OMD</u>
0.865	0.014	<u>COX17</u>	0.898	0.009	<u>EMCN</u>
0.866	0.020	<u>KCTD3</u>	0.902	0.014	<u>OR51E2</u>
0.867	0.028	<u>TUFM</u>	0.898	0.010	<u>ZMYM1</u>
0.844	0.005	<u>KIAA0754</u>	0.907	0.019	<u>RAB9A</u>
0.859	0.020	<u>PRMT1</u>	0.893	0.009	<u>RAPGEF4</u>

0.846	0.016	<u>BST2</u>	0.900	0.017	<u>ESRRG</u>
0.846	0.017	<u>TPX2</u>	0.899	0.015	<u>CAB39L</u>
0.857	0.029	<u>RNASEH1</u>	0.892	0.009	<u>SLC33A1</u>
0.853	0.029	<u>ARPC4</u>	0.896	0.013	<u>APPBP2</u>
0.856	0.032	<u>SMARCD2</u>	0.897	0.018	<u>DLG2</u>
0.839	0.016	<u>PRDX4</u>	0.903	0.025	<u>CLPX</u>
0.834	0.013	<u>PRAF2</u>	0.909	0.031	ZNF318
0.840	0.020	<u>PPT1</u>	0.894	0.019	<u>UBXN4</u>
0.846	0.026	<u>GOLGA2</u>	0.892	0.018	<u>GNRH2</u>
0.842	0.025	<u>SIGMAR1</u>	0.885	0.011	<u>F11R</u>
0.840	0.024	<u>FIBP</u>	0.878	0.005	<u>CCNL1</u>
0.841	0.026	<u>NME1</u>	0.888	0.016	FAM188A
0.833	0.019	<u>NIP7</u>	0.891	0.021	<u>SEC23A</u>
0.835	0.022	<u>PDSS2</u>	0.881	0.012	<u>ITIH1</u>
0.844	0.050	<u>MAP3K7</u>	0.876	0.008	<u>ARL15</u>
0.823	0.035	<u>MTHFD2</u>	0.890	0.022	<u>ALDH5A1</u>
0.818	0.033	<u>ENDOG</u>	0.885	0.018	<u>UEVLD</u>
0.803	0.019	<u>KPTN</u>	0.885	0.020	<u>RBM12</u>
0.810	0.028	<u>RPL15</u>	0.879	0.016	<u>SEC24D</u>
0.811	0.029	<u>UBE2V2</u>	0.878	0.018	<u>ETFDH</u>
0.812	0.032	<u>GPI</u>	0.875	0.015	<u>PAQR3</u>
0.802	0.036	<u>RNASEH2A</u>	0.873	0.016	<u>CDK2</u>
0.811	0.048	<u>CACNA1B</u>	0.872	0.015	<u>HHEX</u>
0.803	0.040	<u>PPP2R4</u>	0.870	0.013	<u>STX4</u>
0.799	0.038	<u>ARF5</u>	0.879	0.023	<u>TOX4</u>
0.789	0.028	C11ORF2	0.871	0.016	<u>PIBF1</u>
0.807	0.047	<u>BRD3</u>	0.876	0.022	<u>CIAO1</u>
0.784	0.027	<u>HIST1H2BF</u>	0.869	0.016	<u>APP</u>
0.797	0.042	<u>CCT3</u>	0.869	0.015	<u>LIN7C</u>
0.789	0.036	<u>DNTTIP2</u>	0.872	0.020	<u>CDH4</u>
0.806	0.054	<u>U2AF2</u>	0.868	0.016	<u>PPM1B</u>
0.799	0.048	PEX10	0.866	0.017	<u>NR2E1</u>
0.782	0.031	<u>CELF1</u>	0.869	0.020	<u>SERPINA1</u>
0.802	0.051	<u>STAMPB</u>	0.869	0.021	<u>UHRF1BP1L</u>
0.767	0.022	<u>SRM</u>	0.854	0.008	<u>BMX</u>
0.780	0.035	<u>TROAP</u>	0.860	0.017	<u>NUP98</u>
0.796	0.051	<u>NUP210</u>	0.855	0.012	<u>GC</u>
0.775	0.032	<u>GLT25D1</u>	0.867	0.025	<u>AP1S2</u>
0.787	0.049	<u>MAN1B1</u>	0.852	0.011	<u>PWP1</u>
0.770	0.038	<u>CDCA3</u>	0.865	0.025	<u>HMX1</u>
0.762	0.032	SKIV2L	0.858	0.018	<u>CLEC1A</u>
0.756	0.027	<u>MICU1</u>	0.858	0.021	<u>CEP170</u>
0.783	0.053	<u>TM9SF1</u>	0.863	0.028	<u>MYO1B</u>
0.762	0.033	<u>NCOA3</u>	0.850	0.017	<u>HIPK1</u>
0.784	0.055	<u>SNX6</u>	0.844	0.011	<u>SERHL2</u>
0.778	0.052	<u>SDCCAG3</u>	0.859	0.026	C18ORF10
0.748	0.024	<u>PSMG1</u>	0.851	0.020	<u>F13A1</u>

0.775	0.052	<u>CHEK2</u>	0.848	0.022	<u>C1ORF38</u>
0.769	0.048	<u>TRIM28</u>	0.849	0.023	<u>C8ORF60</u>
0.761	0.040	<u>ZNF544</u>	0.836	0.014	<u>CPA3</u>
0.746	0.036	<u>HRAS</u>	0.861	0.039	<u>COPS8</u>
0.757	0.048	<u>IPO5</u>	0.834	0.014	<u>EVI2A</u>
0.773	0.065	<u>STK25</u>	0.848	0.029	<u>SPARCL1</u>
0.744	0.038	<u>TPD52</u>	0.851	0.034	<u>LANCL2</u>
0.760	0.054	<u>CCT6A</u>	0.844	0.027	<u>CANX</u>
0.759	0.053	<u>DSC3</u>	0.847	0.030	<u>C4BPB</u>
0.760	0.058	<u>BCS1L</u>	0.847	0.030	<u>OFD1</u>
0.751	0.052	<u>TUSC2</u>	0.839	0.026	<u>CAMSAP2</u>
0.752	0.056	<u>BAG5</u>	0.828	0.018	<u>IL13RA1</u>
0.750	0.055	<u>SLC35B1</u>	0.842	0.035	<u>PEX7</u>
0.764	0.075	<u>RPS28</u>	0.842	0.036	<u>CALD1</u>
0.724	0.039	<u>MRT04</u>	0.849	0.043	<u>VPS41</u>
0.720	0.035	<u>KIAA0100</u>	0.839	0.035	<u>GDPD5</u>
0.758	0.082	<u>SELL</u>	0.830	0.027	<u>ZNF223</u>
0.737	0.062	<u>RUVBL1</u>	0.826	0.024	<u>APLNR</u>
0.723	0.048	<u>EBP</u>	0.823	0.023	<u>GIMAP6</u>
0.726	0.053	<u>DYNLRB1</u>	0.822	0.023	<u>NOTCH4</u>
0.732	0.063	<u>ACSL4</u>	0.832	0.033	<u>STMN4</u>
0.724	0.064	<u>SCD</u>	0.839	0.040	<u>EDN3</u>
0.730	0.069	<u>MBD3</u>	0.821	0.023	<u>OSBPL3</u>
0.698	0.050	<u>PPIE</u>	0.831	0.034	<u>PDE4DIP</u>
0.693	0.047	<u>POLR2H</u>	0.814	0.018	<u>GRM3</u>
0.708	0.067	<u>MZT2B</u>	0.839	0.045	<u>MEF2A</u>
0.708	0.068	<u>TNPO1</u>	0.814	0.019	<u>ZNF557</u>
0.678	0.041	<u>UBE2S</u>	0.819	0.026	<u>KLHL2</u>
0.690	0.058	<u>KARS</u>	0.809	0.020	<u>KIAA0556</u>
0.689	0.063	<u>KEAP1</u>	0.817	0.031	<u>VRK2</u>
0.675	0.052	<u>TXLNA</u>	0.808	0.024	<u>CLIC5</u>
0.690	0.072	<u>ZNF221</u>	0.805	0.024	<u>CDKL3</u>
0.684	0.078	<u>KPNB1</u>	0.802	0.020	<u>FEZF2</u>
0.654	0.051	<u>MTFR1</u>	0.816	0.035	<u>FCER1G</u>
0.678	0.077	<u>UTP6</u>	0.810	0.035	<u>ITIH3</u>
0.662	0.063	<u>PYCR1</u>	0.801	0.029	<u>ENTPD1</u>
0.656	0.059	<u>STMN1</u>	0.803	0.031	<u>ZNF204P</u>
0.664	0.068	<u>GNPDA1</u>	0.795	0.023	<u>GABRA5</u>
0.651	0.058	<u>SNRPD2</u>	0.797	0.027	<u>NECAB2</u>
0.667	0.076	<u>PRMT5</u>	0.813	0.045	<u>ZC3H7A</u>
0.658	0.071	<u>SEH1L</u>	0.792	0.025	<u>GDAP1L1</u>
0.682	0.096	<u>RAB11A</u>	0.790	0.024	<u>BET1L</u>
0.671	0.087	<u>DHX30</u>	0.808	0.043	<u>SKAP2</u>
0.648	0.067	<u>SFXN1</u>	0.803	0.037	<u>AQP9</u>
0.653	0.076	<u>RPS9</u>	0.783	0.020	<u>ZNF276</u>
0.641	0.072	<u>CCNA2</u>	0.796	0.033	<u>JMJD6</u>
0.648	0.082	<u>TRAM1</u>	0.795	0.034	<u>CASP4</u>

0.645	0.079	<u>RPS2</u>	0.800	0.038	<u>TGFB1</u>
0.666	0.101	<u>SP110</u>	0.806	0.046	<u>EGFR</u>
0.622	0.057	<u>USP14</u>	0.781	0.023	<u>MARCH1</u>
0.668	0.106	<u>ZC3H14</u>	0.776	0.018	<u>TCIRG1</u>
0.644	0.089	<u>COPB1</u>	0.786	0.030	<u>ASGR2</u>
0.603	0.058	<u>GNB2L1</u>	0.789	0.034	<u>CSF3R</u>
0.638	0.093	<u>A4GALT</u>	0.789	0.035	<u>ACSM1</u>
0.652	0.108	<u>CXORF56</u>	0.788	0.034	<u>BDH2</u>
0.610	0.066	<u>NOP56</u>	0.785	0.032	<u>SERPINB9</u>
0.625	0.089	<u>DDX49</u>	0.796	0.044	<u>RAB6B</u>
0.653	0.118	<u>DIAPH2</u>	0.786	0.035	<u>FEM1B</u>
0.563	0.035	<u>CSDA</u>	0.786	0.037	<u>ADAMTS13</u>
0.591	0.064	<u>HP</u>	0.795	0.046	<u>ST20</u>
0.620	0.106	<u>YWHAB</u>	0.804	0.056	<u>ZNF536</u>
0.607	0.097	<u>VEGFB</u>	0.765	0.017	<u>CCDC102B</u>
0.583	0.078	<u>TFCP2L1</u>	0.762	0.017	<u>SLC2A10</u>
0.607	0.110	<u>FAM134A</u>	0.787	0.042	<u>CDH11</u>
0.585	0.090	<u>PNP</u>	0.789	0.049	<u>PRTN3</u>
0.609	0.114	<u>SCRIB</u>	0.775	0.040	<u>TTL7</u>
0.561	0.066	<u>GLI3</u>	0.755	0.022	<u>PTPRK</u>
0.598	0.106	<u>CENPC1</u>	0.788	0.056	<u>NFATC2IP</u>
0.594	0.104	<u>TMED9</u>	0.776	0.046	<u>MOSPD2</u>
0.601	0.122	<u>SYNCRIP</u>	0.764	0.034	<u>EFR3A</u>
0.601	0.124	<u>ASNA1</u>	0.777	0.049	<u>CNPY3</u>
0.571	0.097	<u>FARSA</u>	0.759	0.031	<u>CLDND1</u>
0.577	0.107	<u>TMEM160</u>	0.773	0.045	<u>RNF111</u>
0.606	0.135	<u>ADM</u>	0.755	0.028	<u>PDHX</u>
0.571	0.103	<u>EDF1</u>	0.758	0.031	<u>CACNG3</u>
0.583	0.116	<u>IMP4</u>	0.771	0.048	<u>TMOD3</u>
0.577	0.115	<u>BABAM1</u>	0.813	0.091	<u>ZFAND1</u>
0.549	0.088	<u>CRTAM</u>	0.760	0.040	<u>SPAST</u>
0.569	0.108	<u>GSS</u>	0.752	0.035	<u>ANKRA2</u>
0.547	0.090	<u>MAT2A</u>	0.749	0.033	<u>KCNV1</u>
0.579	0.124	<u>TCEA2</u>	0.750	0.035	<u>HBEGF</u>
0.564	0.113	<u>GHITM</u>	0.751	0.036	<u>CADPS</u>
0.532	0.083	<u>DUX1</u>	0.765	0.052	<u>PPP2R5A</u>
0.527	0.088	<u>CDKN2A</u>	0.762	0.053	<u>MDFIC</u>
0.515	0.082	<u>SH3BP1</u>	0.740	0.032	<u>FAM49A</u>
0.517	0.085	<u>BAGE</u>	0.729	0.021	<u>PDE5A</u>
0.546	0.117	<u>RPL22</u>	0.761	0.054	<u>PLP2</u>
0.541	0.112	<u>APEH</u>	0.741	0.041	<u>CD38</u>
0.543	0.121	<u>EIF3G</u>	0.756	0.057	<u>CD48</u>
0.525	0.105	<u>FMNL1</u>	0.743	0.048	<u>GABRG2</u>
0.518	0.105	<u>XBP1</u>	0.753	0.058	<u>NUMB</u>
0.521	0.119	<u>CLPX</u>	0.730	0.043	<u>CEBPE</u>
0.531	0.130	<u>FADS1</u>	0.755	0.069	<u>CLCN3</u>
0.517	0.119	<u>RNMT</u>	0.724	0.039	<u>TREML2</u>

0.522	0.123	<u>ELOVL6</u>	0.718	0.033	<u>COPB2</u>
0.565	0.174	<u>KCNC2</u>	0.727	0.043	<u>PITX3</u>
0.521	0.130	<u>MGAT4B</u>	0.725	0.042	<u>KCNQ1DN</u>
0.503	0.116	<u>LIPC</u>	0.727	0.048	<u>AAK1</u>
0.522	0.137	<u>DNAJC9</u>	0.721	0.042	<u>TMEM144</u>
0.547	0.167	<u>CETP</u>	0.741	0.064	<u>SCAF4</u>
0.515	0.139	<u>PHB</u>	0.743	0.068	<u>HABP4</u>
0.504	0.131	<u>ATP6V0B</u>	0.724	0.052	<u>PHIP</u>
0.509	0.139	<u>EIF4E</u>	0.717	0.044	<u>DUS4L</u>
0.510	0.142	<u>GTF3A</u>	0.704	0.032	<u>GAS8</u>
0.515	0.162	<u>WDR44</u>	0.711	0.039	<u>RFPL1-AS1</u>
			0.719	0.047	<u>WDR78</u>
			0.721	0.050	<u>NFE2L2</u>
			0.725	0.056	<u>PRKX</u>
			0.720	0.053	<u>POLE2</u>
			0.729	0.064	<u>LPXN</u>
			0.719	0.058	<u>SLC38A6</u>
			0.687	0.026	<u>KIF20A</u>
			0.703	0.047	<u>KIAA1107</u>
			0.696	0.042	<u>LMBRD1</u>
			0.717	0.068	<u>AGRN</u>
			0.705	0.057	<u>OR7E47P</u>
			0.701	0.057	<u>SLC16A5</u>
			0.707	0.068	<u>LY86</u>
			0.686	0.051	<u>ADAT1</u>
			0.693	0.062	<u>THRAP3</u>
			0.698	0.072	<u>TRIM14</u>
			0.677	0.052	<u>FPR3</u>
			0.691	0.070	<u>PDE4B</u>
			0.690	0.069	<u>EMR2</u>
			0.681	0.063	<u>RBM15B</u>
			0.687	0.070	<u>HSPA4</u>
			0.682	0.067	<u>WIZ</u>
			0.661	0.049	<u>CNKS2</u>
			0.675	0.063	<u>PTPRE</u>
			0.658	0.052	<u>ZNF589</u>
			0.665	0.060	<u>FRMPD4</u>
			0.665	0.060	<u>NUDT21</u>
			0.652	0.047	<u>PRR15L</u>
			0.676	0.078	<u>WTAP</u>
			0.668	0.073	<u>CASP1</u>
			0.683	0.089	<u>TWF1</u>
			0.655	0.065	<u>HIST2H2BE</u>
			0.684	0.094	<u>CCR1</u>
			0.653	0.069	<u>KALRN</u>
			0.648	0.065	<u>AQR</u>
			0.645	0.063	<u>INTS1</u>

	0.655	0.073	<u>CLEC5A</u>
	0.639	0.058	<u>MTM1</u>
	0.602	0.021	<u>ABCF3</u>
	0.655	0.075	<u>TNFAIP1</u>
	0.664	0.084	<u>THAP3</u>
	0.666	0.087	<u>CD68</u>
	0.690	0.111	<u>PSMD7</u>
	0.648	0.071	<u>POU4F1</u>
	0.654	0.080	<u>ZNF770</u>
	0.639	0.065	<u>PIAS1</u>
	0.646	0.075	<u>TBX10</u>
	0.634	0.065	<u>CA4</u>
	0.649	0.082	<u>ATP6V1C1</u>
	0.606	0.039	<u>HK1</u>
	0.647	0.080	<u>EPS8L1</u>
	0.643	0.081	<u>CST2</u>
	0.633	0.071	<u>F2</u>
	0.692	0.133	<u>NGFRAP1</u>
	0.654	0.099	<u>HK2</u>
	0.644	0.093	<u>SLC4A7</u>
	0.655	0.105	<u>KPNA2</u>
	0.639	0.092	<u>MON2</u>
	0.649	0.107	<u>EIF4E2</u>
	0.626	0.087	<u>FAM179B</u>
	0.637	0.101	<u>B4GALT1</u>
	0.614	0.080	<u>PEX11B</u>
	0.622	0.090	<u>YIPF4</u>
	0.588	0.072	<u>PCYT2</u>
	0.621	0.107	<u>SMARCA5</u>
	0.602	0.089	<u>HPX</u>
	0.608	0.095	<u>HOMER3</u>
	0.591	0.081	<u>ST3GAL2</u>
	0.614	0.104	<u>MPZL1</u>
	0.609	0.099	<u>CTBS</u>
	0.631	0.122	<u>PNISR</u>
	0.587	0.078	<u>PEX5L</u>
	0.606	0.098	<u>TROVE2</u>
	0.580	0.077	<u>AQP1</u>
	0.590	0.091	<u>SERTAD2</u>
	0.597	0.099	<u>HAP1</u>
	0.600	0.103	<u>P2RY1</u>
	0.598	0.102	<u>TCF12</u>
	0.605	0.109	<u>SEPT6</u>
	0.602	0.106	<u>SSBP1</u>
	0.594	0.098	<u>ACAP2</u>
	0.592	0.099	<u>DIDO1</u>
	0.547	0.056	<u>INPP1</u>

	0.593	0.104	<u>CCL2</u>
	0.574	0.089	LOC254896
	0.584	0.103	<u>SLC35A2</u>
	0.577	0.096	<u>HAND2</u>
	0.577	0.098	<u>RAB28</u>
	0.585	0.106	<u>GDF11</u>
	0.560	0.081	<u>MCM6</u>
	0.591	0.114	LINC00342
	0.586	0.115	<u>CD44</u>
	0.576	0.105	<u>FOLR3</u>
	0.563	0.104	<u>N4BP1</u>
	0.566	0.111	NARFL
	0.544	0.091	<u>RAB7A</u>
	0.547	0.095	<u>SIM2</u>
	0.559	0.107	<u>TRPC6</u>
	0.546	0.097	<u>CALCRL</u>
	0.544	0.096	<u>FAM105A</u>
	0.568	0.121	<u>PPP2CB</u>
	0.554	0.109	<u>NFYA</u>
	0.551	0.107	<u>SCN3B</u>
	0.543	0.101	MUC8
	0.554	0.118	<u>PAPOLA</u>
	0.548	0.119	<u>EIF5A</u>
	0.531	0.107	<u>SEPT4</u>
	0.514	0.090	<u>TMSB15A</u>
	0.552	0.131	<u>SOCS5</u>
	0.542	0.126	<u>MMP14</u>
	0.539	0.127	<u>IL11</u>
	0.533	0.122	<u>BMP2K</u>
	0.527	0.118	<u>SLC25A14</u>
	0.522	0.114	<u>CASC1</u>
	0.535	0.130	<u>CDKN2C</u>
	0.545	0.140	<u>ALG13</u>
	0.525	0.124	<u>CCR2</u>
	0.530	0.132	<u>TMEM5</u>
	0.520	0.122	<u>OGFR</u>
	0.520	0.123	<u>ACO2</u>
	0.523	0.131	<u>KDM6B</u>
	0.547	0.156	<u>FAM13B</u>
	0.514	0.123	<u>CNTN2</u>
	0.505	0.116	<u>MOBP</u>
	0.513	0.129	<u>ZCCHC11</u>
	0.515	0.133	<u>GRB10</u>
	0.504	0.130	<u>FGF1</u>
	0.504	0.130	<u>PIGB</u>
	0.506	0.133	<u>PTMS</u>
	0.501	0.129	<u>NPPA</u>

	0.503	0.133	<u>PHKB</u>
	0.504	0.135	<u>C5AR1</u>
	0.508	0.140	<u>HUWE1</u>
	0.521	0.154	<u>TMEM93</u>
	0.501	0.144	<u>PEX1</u>
	0.511	0.155	<u>DDIT4</u>
	0.522	0.168	<u>CXADR</u>
	0.507	0.159	<u>TGOLN2</u>

VCAP_24h based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.995	0.004	<u>SPAG7</u>	0.996	0.004	<u>USP46</u>
0.991	0.003	<u>HAX1</u>	0.995	0.004	<u>DZIP3</u>
0.991	0.004	<u>EIF3I</u>	0.994	0.004	<u>CPT1A</u>
0.991	0.004	<u>RANGAP1</u>	0.994	0.004	<u>SLC23A2</u>
0.990	0.004	<u>SPATS2</u>	0.993	0.004	<u>TCL1B</u>
0.991	0.005	<u>GGPS1</u>	0.994	0.005	<u>DENND2D</u>
0.990	0.004	<u>ZNF259</u>	0.993	0.005	<u>NRG2</u>
0.991	0.005	<u>UOCRB</u>	0.993	0.004	<u>FRK</u>
0.990	0.004	<u>GRSF1</u>	0.992	0.004	<u>CLCN7</u>
0.989	0.004	<u>PFDN5</u>	0.993	0.004	<u>PRIM2</u>
0.990	0.005	<u>TMEM97</u>	0.992	0.004	<u>SH3D21</u>
0.988	0.004	<u>C16ORF88</u>	0.992	0.004	<u>CD164</u>
0.988	0.003	<u>SMCHD1</u>	0.992	0.005	<u>PLCH1</u>
0.989	0.005	<u>SKIV2L</u>	0.992	0.004	<u>TMF1</u>
0.988	0.004	<u>LMF2</u>	0.992	0.004	<u>USH1C</u>
0.988	0.004	<u>PSPH</u>	0.992	0.005	<u>CADM4</u>
0.987	0.003	<u>RAB7L1</u>	0.991	0.003	<u>PREP</u>
0.988	0.005	<u>HNRNPH3</u>	0.992	0.005	<u>PDIA5</u>
0.987	0.004	<u>RAP2C</u>	0.991	0.004	<u>HSD3B2</u>
0.988	0.004	<u>NUP98</u>	0.991	0.005	<u>PART1</u>
0.988	0.004	<u>NPIP</u>	0.991	0.004	<u>PLEC</u>
0.987	0.004	<u>DAZAP2</u>	0.991	0.004	<u>GRSF1</u>
0.987	0.004	<u>NBPF10</u>	0.991	0.004	<u>DYRK2</u>
0.988	0.004	<u>PDIA4</u>	0.990	0.004	<u>GOLGA4</u>
0.988	0.004	<u>PPIF</u>	0.990	0.004	<u>FAM171A1</u>
0.987	0.004	<u>WWP1</u>	0.990	0.004	<u>ETAA1</u>
0.987	0.004	<u>GRK6</u>	0.990	0.004	<u>NCRNA00185</u>
0.987	0.005	<u>TIAL1</u>	0.990	0.004	<u>SCN9A</u>
0.987	0.005	<u>SYPL1</u>	0.990	0.004	<u>ABHD2</u>
0.986	0.004	<u>ZFAND1</u>	0.990	0.004	<u>CDSN</u>
0.987	0.005	<u>STAU1</u>	0.989	0.003	<u>RNF126P1</u>
0.986	0.004	<u>DYNC1LI1</u>	0.990	0.004	<u>RAP1A</u>
0.986	0.004	<u>HSP90AB1</u>	0.990	0.004	<u>RAB3B</u>
0.986	0.005	<u>SLC4A2</u>	0.990	0.004	<u>RIBC2</u>
0.984	0.003	<u>MYBL1</u>	0.990	0.005	<u>POU3F1</u>

0.984	0.003	<u>MCL1</u>	0.990	0.004	<u>KHSRP</u>
0.986	0.005	<u>MLLT11</u>	0.990	0.004	<u>PIAS3</u>
0.985	0.005	<u>PSMB9</u>	0.990	0.004	<u>UFL1</u>
0.985	0.004	<u>MSL1</u>	0.990	0.005	<u>DLG3</u>
0.984	0.004	<u>NAAA</u>	0.990	0.005	<u>PCYT1B</u>
0.983	0.003	<u>FGFR4</u>	0.990	0.004	<u>NKX3-1</u>
0.982	0.002	<u>RIT1</u>	0.990	0.004	<u>CGA</u>
0.983	0.004	<u>NEK4</u>	0.990	0.004	<u>PPOX</u>
0.982	0.004	<u>MTUS1</u>	0.990	0.005	<u>RAB30</u>
0.981	0.003	<u>RAD54L2</u>	0.989	0.004	<u>FAM86A</u>
0.982	0.004	<u>IL6ST</u>	0.989	0.004	<u>UGT2B17</u>
0.982	0.004	<u>PHF10</u>	0.990	0.005	<u>CAPN10</u>
0.982	0.004	<u>GPBP1L1</u>	0.989	0.004	<u>GAB2</u>
0.982	0.004	<u>GADD45B</u>	0.990	0.005	<u>ITGB1</u>
0.983	0.005	<u>RNF220</u>	0.990	0.005	<u>GGA2</u>
0.982	0.004	<u>PLS3</u>	0.990	0.005	<u>UBA6</u>
0.980	0.003	<u>STAT5B</u>	0.990	0.005	<u>SCUBE3</u>
0.982	0.004	<u>TALDO1</u>	0.988	0.003	<u>SUMO4</u>
0.981	0.004	<u>BST2</u>	0.988	0.003	<u>KLHL25</u>
0.982	0.005	<u>TCTN3</u>	0.989	0.005	<u>ARHGAP44</u>
0.982	0.005	<u>C12ORF43</u>	0.989	0.005	<u>LMF1</u>
0.981	0.004	<u>P2RX5</u>	0.989	0.004	<u>AASS</u>
0.981	0.005	<u>DCTN6</u>	0.989	0.004	<u>U2AF2</u>
0.980	0.003	<u>TSPAN7</u>	0.987	0.003	<u>ABHD11</u>
0.980	0.004	<u>IFIT3</u>	0.989	0.005	<u>MALT1</u>
0.981	0.005	<u>PPP1R12A</u>	0.987	0.004	<u>NAT6</u>
0.981	0.005	<u>KDM2A</u>	0.988	0.004	<u>EHHADH</u>
0.981	0.004	<u>GAP43</u>	0.988	0.005	<u>PAX5</u>
0.981	0.004	<u>YARS</u>	0.987	0.003	<u>ETV4</u>
0.981	0.004	<u>STK17A</u>	0.987	0.003	<u>IQGAP2</u>
0.981	0.005	<u>SCAMP4</u>	0.988	0.005	<u>LPHN3</u>
0.981	0.005	<u>TRAM2</u>	0.988	0.005	<u>CHML</u>
0.981	0.005	<u>MAX</u>	0.988	0.005	<u>PDS5B</u>
0.980	0.004	<u>HERC1</u>	0.987	0.004	<u>NUDT18</u>
0.980	0.005	<u>LIMA1</u>	0.988	0.005	<u>LTK</u>
0.980	0.004	<u>TTC4</u>	0.987	0.004	<u>CHL1</u>
0.980	0.005	<u>CCDC93</u>	0.987	0.004	<u>RPS6KA2</u>
0.980	0.004	<u>GOLGA2</u>	0.987	0.004	<u>HAPLN1</u>
0.980	0.004	<u>CDK10</u>	0.988	0.005	<u>ST8SIA4</u>
0.980	0.004	<u>PAK2</u>	0.986	0.004	<u>ATP5L</u>
0.980	0.005	<u>BFAR</u>	0.987	0.004	<u>MYO1A</u>
0.979	0.004	<u>TTI2</u>	0.987	0.005	<u>ATP5C1</u>
0.980	0.004	<u>UBXN7</u>	0.987	0.004	<u>FAM188A</u>
0.980	0.005	<u>RAB14</u>	0.986	0.004	<u>PIGZ</u>
0.978	0.003	<u>NRGN</u>	0.987	0.005	<u>PCCA</u>
0.980	0.005	<u>ING1</u>	0.987	0.005	<u>PQBP1</u>
0.980	0.004	<u>GFER</u>	0.986	0.004	<u>POF1B</u>

0.980	0.005	<u>PTP4A2</u>	0.986	0.004	<u>NPPB</u>
0.979	0.004	<u>ZNF189</u>	0.987	0.005	<u>ATP10B</u>
0.980	0.005	<u>SNRPC</u>	0.986	0.005	<u>TTC30A</u>
0.979	0.004	<u>FAM193A</u>	0.986	0.005	<u>UMPS</u>
0.980	0.005	<u>NBL1</u>	0.985	0.003	<u>RASSF7</u>
0.979	0.004	<u>CALCOCO2</u>	0.985	0.003	<u>SLC12A7</u>
0.979	0.004	<u>KDELR3</u>	0.987	0.005	<u>YTHDC2</u>
0.980	0.005	<u>UBAP2</u>	0.986	0.005	<u>CD24</u>
0.979	0.004	<u>CLDN18</u>	0.986	0.005	<u>FGF5</u>
0.979	0.004	<u>ACTR1A</u>	0.986	0.005	<u>LRP5L</u>
0.979	0.005	<u>LSG1</u>	0.986	0.005	<u>NPFFR1</u>
0.978	0.003	<u>UGP2</u>	0.986	0.005	<u>ITPR1</u>
0.978	0.003	<u>MS4A4A</u>	0.985	0.005	<u>GNA11</u>
0.979	0.005	<u>PFDN1</u>	0.985	0.005	<u>SEC31A</u>
0.979	0.005	<u>SRP54</u>	0.985	0.005	<u>ZCWPW1</u>
0.978	0.004	<u>RASSF4</u>	0.983	0.003	<u>TBCA</u>
0.977	0.003	<u>TNFSF9</u>	0.983	0.003	<u>TSPAN1</u>
0.979	0.005	<u>RAB1F</u>	0.984	0.004	<u>UTF1</u>
0.976	0.002	<u>DSG3</u>	0.985	0.005	<u>AMBP</u>
0.978	0.004	<u>PTMS</u>	0.985	0.005	<u>NR2F6</u>
0.979	0.005	<u>APBA2</u>	0.984	0.005	<u>ARHGAP33</u>
0.978	0.004	<u>VAMP8</u>	0.984	0.004	<u>FAM174B</u>
0.978	0.004	<u>PRSS3</u>	0.985	0.005	<u>CALM1</u>
0.978	0.005	<u>LIAS</u>	0.984	0.004	<u>C9ORF167</u>
0.977	0.004	<u>CTSB</u>	0.984	0.005	<u>KDM4C</u>
0.978	0.004	<u>POMT1</u>	0.984	0.005	<u>ZFHX3</u>
0.978	0.004	<u>UIMC1</u>	0.984	0.005	<u>NCOA2</u>
0.978	0.005	<u>ITM2B</u>	0.984	0.005	<u>ANGPTL7</u>
0.979	0.005	<u>CCNG2</u>	0.984	0.004	<u>IDH2</u>
0.978	0.004	<u>MT3</u>	0.983	0.004	<u>MNS1</u>
0.979	0.005	<u>TTF1</u>	0.983	0.004	<u>LAP3</u>
0.978	0.005	<u>CIAO1</u>	0.984	0.005	<u>COL11A1</u>
0.977	0.004	<u>SFRP4</u>	0.984	0.005	<u>OSBPL10</u>
0.978	0.005	<u>LSM14A</u>	0.984	0.005	<u>IL17RC</u>
0.978	0.004	<u>NUDT4</u>	0.983	0.005	<u>FBXO21</u>
0.978	0.005	<u>DIAPH1</u>	0.982	0.003	<u>HERC2</u>
0.978	0.004	<u>SPATA2</u>	0.983	0.004	<u>IRGQ</u>
0.978	0.005	<u>PEX14</u>	0.983	0.004	<u>FSCN1</u>
0.978	0.005	<u>COPS8</u>	0.983	0.005	<u>ARID1A</u>
0.978	0.005	<u>TCEA1</u>	0.983	0.005	<u>F5</u>
0.977	0.004	<u>MEGF9</u>	0.982	0.004	<u>GPATCH1</u>
0.978	0.005	<u>SHQ1</u>	0.982	0.004	<u>QRSL1</u>
0.977	0.004	<u>PRKD2</u>	0.980	0.002	<u>ADPGK</u>
0.977	0.004	<u>DVL3</u>	0.982	0.004	<u>KIAA0894</u>
0.977	0.004	<u>FUCA1</u>	0.983	0.005	<u>B3GAT1</u>
0.977	0.004	<u>PLEKHA1</u>	0.982	0.004	<u>EXT2</u>
0.977	0.005	<u>M6PR</u>	0.982	0.005	<u>CEP57</u>

0.977	0.005	OBFC2B	0.982	0.005	CCL23
0.978	0.005	DDA1	0.982	0.004	RBL1
0.978	0.005	BANP	0.982	0.004	ZDHC13
0.978	0.005	COMMD9	0.982	0.005	HIST1H1D
0.977	0.005	ELMO2	0.982	0.005	ZEB2
0.976	0.004	PPAP2C	0.982	0.004	INPP1
0.977	0.004	C6ORF64	0.982	0.004	ACTA1
0.976	0.004	REEP1	0.981	0.004	UFC1
0.977	0.005	SRPR	0.981	0.004	PDE8B
0.976	0.003	IGLV2-23	0.981	0.004	LOC399491
0.977	0.004	AGPAT1	0.982	0.005	DDC
0.976	0.004	TSPYL2	0.981	0.004	KLK5
0.977	0.005	GCC2	0.980	0.004	ANPEP
0.974	0.002	F13A1	0.982	0.005	CPS1-IT1
0.978	0.005	PPP6C	0.981	0.005	IL1A
0.976	0.004	FZD7	0.981	0.005	NAP1L2
0.977	0.005	ISCU	0.981	0.005	P4HB
0.976	0.004	CRNN	0.981	0.005	NUS1P3
0.977	0.005	UBAP1	0.981	0.005	SRSF3
0.976	0.004	BCKDHB	0.981	0.005	TYRP1
0.977	0.005	MRPL18	0.980	0.004	CLN6
0.977	0.005	TUBGCP4	0.981	0.005	LCK
0.976	0.004	ATP6V1E1	0.980	0.004	RYR1
0.976	0.004	PGM3	0.981	0.005	MFSD6
0.976	0.004	UGT2A3	0.980	0.004	FARP2
0.976	0.004	PCSK7	0.980	0.004	WARS2
0.976	0.005	TRAM1	0.981	0.005	ZMAT5
0.976	0.004	RGL2	0.980	0.005	ARHGEF16
0.976	0.004	DCAF10	0.981	0.005	NCF4
0.976	0.005	DLX2	0.980	0.004	COL9A1
0.976	0.005	NECAP2	0.980	0.004	NLGN4X
0.975	0.004	FAM8A1	0.980	0.005	LOC202181
0.976	0.005	PRR7	0.980	0.005	KLC2
0.975	0.004	CD7	0.982	0.006	FAM153A
0.974	0.002	SERHL2	0.980	0.005	C19ORF40
0.976	0.005	DERL2	0.980	0.005	LPHN1
0.976	0.004	MUM1	0.980	0.005	AZI2
0.975	0.004	CHMP3	0.980	0.005	ULK2
0.976	0.004	NKIRAS2	0.979	0.004	DAAM1
0.977	0.006	C12ORF48	0.979	0.004	LRIG1
0.976	0.005	NXF1	0.980	0.005	HEXA
0.976	0.005	E2F6	0.979	0.004	TMEM126B
0.976	0.005	RBMS1	0.980	0.005	ATP9A
0.974	0.003	TNFRSF12A	0.979	0.004	MEGF6
0.975	0.004	C1QTNF1	0.980	0.005	TMEM151B
0.976	0.005	STK19	0.979	0.004	MPV17
0.975	0.004	CLK3	0.980	0.005	KLK7

0.976	0.005	<u>IDH3G</u>	0.979	0.005	<u>ZHX2</u>
0.976	0.005	<u>TRAP1</u>	0.980	0.005	<u>FOXH1</u>
0.975	0.004	<u>CD82</u>	0.979	0.005	<u>ECHDC3</u>
0.975	0.005	<u>C1ORF216</u>	0.979	0.005	<u>TAGLN2</u>
0.974	0.004	<u>FBXO34</u>	0.979	0.005	<u>KLK8</u>
0.974	0.004	<u>FAM102A</u>	0.978	0.004	<u>DNMT3B</u>
0.975	0.004	<u>C9ORF114</u>	0.979	0.005	<u>GAN</u>
0.975	0.005	<u>C9ORF78</u>	0.979	0.005	<u>NUP43</u>
0.974	0.005	<u>ZNF529</u>	0.979	0.005	<u>FOXJ1</u>
0.973	0.003	<u>SALL1</u>	0.980	0.005	<u>SORBS1</u>
0.973	0.004	<u>C1ORF61</u>	0.977	0.003	<u>BRMS1</u>
0.974	0.005	<u>DUS4L</u>	0.980	0.006	<u>KRT85</u>
0.973	0.004	<u>ZDHHC18</u>	0.979	0.005	<u>PROC</u>
0.973	0.004	<u>SCMH1</u>	0.979	0.005	<u>ICOSLG</u>
0.974	0.005	<u>AKAP8</u>	0.979	0.005	<u>CCDC165</u>
0.974	0.005	<u>TNPO1</u>	0.979	0.005	<u>MAP2K7</u>
0.973	0.004	<u>DBN1</u>	0.979	0.005	<u>TOMM22</u>
0.973	0.005	<u>ATG13</u>	0.978	0.004	<u>TRMT61B</u>
0.974	0.005	<u>RPL29</u>	0.978	0.004	<u>KHDRBS3</u>
0.973	0.004	<u>COL6A2</u>	0.978	0.004	<u>ZNF226</u>
0.973	0.004	<u>BAP1</u>	0.978	0.005	<u>C8ORF60</u>
0.973	0.005	<u>CNPY3</u>	0.978	0.004	<u>GLTPD1</u>
0.973	0.005	<u>PKD1P1</u>	0.978	0.004	<u>FAM173A</u>
0.973	0.005	<u>RPS19</u>	0.978	0.005	<u>GNG4</u>
0.972	0.004	<u>NEU1</u>	0.978	0.005	<u>PPAP2A</u>
0.972	0.004	<u>TNKS2</u>	0.978	0.004	<u>ZNF33B</u>
0.971	0.003	<u>C16ORF7</u>	0.977	0.004	<u>GOLGA8H</u>
0.973	0.005	<u>CARS</u>	0.978	0.005	<u>CHRNA2</u>
0.971	0.004	<u>TMPRSS11D</u>	0.978	0.005	<u>PSMA2</u>
0.971	0.004	<u>DRAM1</u>	0.978	0.004	<u>FYCO1</u>
0.976	0.008	<u>DDX41</u>	0.978	0.005	<u>PPP6R1</u>
0.972	0.005	<u>RPP30</u>	0.977	0.004	<u>RUFY2</u>
0.972	0.004	<u>CLEC11A</u>	0.978	0.005	<u>DLG5</u>
0.972	0.005	<u>NFYB</u>	0.977	0.004	<u>DHRS1</u>
0.971	0.004	<u>LOC220594</u>	0.978	0.005	<u>LSAMP</u>
0.971	0.004	<u>MST1</u>	0.978	0.005	<u>EXOG</u>
0.971	0.004	<u>TMEM45A</u>	0.979	0.006	<u>ERN2</u>
0.971	0.004	<u>FERMT1</u>	0.976	0.003	<u>POP7</u>
0.971	0.004	<u>RAF1</u>	0.977	0.005	<u>CYP24A1</u>
0.973	0.006	<u>MLX</u>	0.978	0.005	<u>CLDN3</u>
0.971	0.005	<u>PSMD6</u>	0.977	0.004	<u>PEPD</u>
0.970	0.004	<u>ENOX2</u>	0.978	0.005	<u>ATG2B</u>
0.971	0.005	<u>IMMT</u>	0.977	0.005	<u>TREX1</u>
0.969	0.003	<u>TMEM140</u>	0.977	0.004	<u>C14ORF169</u>
0.970	0.004	<u>CREB3</u>	0.977	0.004	<u>NDN</u>
0.970	0.004	<u>S100A14</u>	0.977	0.004	<u>MAGED1</u>
0.970	0.004	<u>ERF</u>	0.977	0.005	<u>GMIP</u>

0.970	0.004	<u>ANXA10</u>	0.977	0.004	<u>ZNF358</u>
0.970	0.005	<u>RTN4</u>	0.976	0.004	<u>PAXIP1</u>
0.970	0.004	<u>FUT4</u>	0.977	0.004	<u>POGK</u>
0.969	0.004	<u>KIAA0319L</u>	0.977	0.005	<u>NEBL</u>
0.969	0.004	<u>TRAF2</u>	0.977	0.005	<u>PPM1F</u>
0.970	0.005	<u>FOLR1</u>	0.977	0.004	<u>CXCL13</u>
0.967	0.003	<u>SERPINI1</u>	0.977	0.004	<u>ZBTB38</u>
0.969	0.005	<u>RHCG</u>	0.977	0.005	<u>PDHX</u>
0.968	0.003	<u>TEAD3</u>	0.976	0.004	<u>KDELC1</u>
0.969	0.005	<u>DIEXF</u>	0.976	0.005	<u>EIF4H</u>
0.969	0.004	<u>TEX261</u>	0.977	0.005	<u>PROX1</u>
0.969	0.005	<u>LMO4</u>	0.976	0.004	<u>ENTPD6</u>
0.968	0.004	<u>CASP2</u>	0.977	0.005	<u>PDIA4</u>
0.969	0.005	<u>TRAK1</u>	0.976	0.005	<u>FLG</u>
0.967	0.003	<u>TMEM183A</u>	0.975	0.004	<u>PIIP5K2</u>
0.968	0.004	<u>MRC2</u>	0.976	0.005	<u>TM9SF1</u>
0.968	0.004	<u>STRADA</u>	0.976	0.005	<u>NBAS</u>
0.968	0.004	<u>SPHK1</u>	0.976	0.005	<u>FCGR2A</u>
0.968	0.004	<u>GCNT1</u>	0.976	0.005	<u>SPATA2L</u>
0.967	0.003	<u>APOL1</u>	0.976	0.005	<u>SMARCE1</u>
0.968	0.004	<u>FBXO11</u>	0.976	0.004	<u>TEAD1</u>
0.967	0.004	<u>DLG4</u>	0.976	0.005	<u>NASP</u>
0.969	0.006	<u>BICD2</u>	0.976	0.004	<u>PC</u>
0.971	0.008	<u>KIAA0913</u>	0.976	0.005	<u>PRPS1</u>
0.967	0.004	<u>CNPY4</u>	0.976	0.004	<u>DYNC2H1</u>
0.965	0.003	<u>SEMA3G</u>	0.976	0.005	<u>LY6G6C</u>
0.967	0.004	<u>MEOX1</u>	0.976	0.005	<u>FABP6</u>
0.967	0.004	<u>RAB25</u>	0.976	0.005	<u>FAM189A1</u>
0.969	0.007	<u>BRP44L</u>	0.976	0.005	<u>CADPS2</u>
0.966	0.004	<u>MGST3</u>	0.977	0.006	<u>TLL2</u>
0.966	0.005	<u>THUMPD1</u>	0.976	0.005	<u>CIDEA</u>
0.966	0.004	<u>GABARAPL1</u>	0.975	0.003	<u>UBE2M</u>
0.967	0.005	<u>ERGIC2</u>	0.976	0.005	<u>LDOC1</u>
0.966	0.004	<u>UBXN6</u>	0.978	0.007	<u>MAN1A2</u>
0.966	0.005	<u>MYO1C</u>	0.976	0.005	<u>MANEA</u>
0.965	0.005	<u>CDK9</u>	0.977	0.006	<u>CNTN1</u>
0.965	0.004	<u>BCKDHA</u>	0.976	0.005	<u>ARVCF</u>
0.966	0.006	<u>LOC399491</u>	0.975	0.004	<u>PRRC2B</u>
0.968	0.008	<u>MUC5AC</u>	0.976	0.005	<u>CHODL</u>
0.964	0.004	<u>CEP192</u>	0.975	0.005	<u>SLC5A1</u>
0.965	0.005	<u>ZNF500</u>	0.975	0.005	<u>RPL23AP32</u>
0.965	0.005	<u>RPL27A</u>	0.975	0.004	<u>ALOX15B</u>
0.964	0.005	<u>TMEM33</u>	0.980	0.009	<u>M6PR</u>
0.964	0.005	<u>RPS10</u>	0.975	0.005	<u>RHOT1</u>
0.963	0.005	<u>MAT2A</u>	0.975	0.005	<u>CSTF1</u>
0.961	0.004	<u>MAML1</u>	0.975	0.004	<u>CTSC</u>
0.967	0.010	<u>SPTLC1</u>	0.975	0.005	<u>INF2</u>

0.961	0.005	<u>ZNF238</u>	0.978	0.008	<u>OR1F1</u>
0.961	0.005	<u>HDLBP</u>	0.975	0.005	<u>RGS9</u>
0.961	0.005	<u>RPL12</u>	0.975	0.005	<u>PAQR4</u>
0.960	0.005	<u>EIF2S2</u>	0.977	0.007	<u>DCN</u>
0.961	0.005	KIAA0649	0.975	0.004	<u>SF1</u>
0.965	0.009	<u>PALLD</u>	0.975	0.004	<u>BOLA1</u>
0.960	0.004	<u>FLOT1</u>	0.975	0.005	<u>HIST1H1B</u>
0.959	0.004	<u>HIF1AN</u>	0.975	0.005	<u>PDZRN4</u>
0.961	0.006	<u>ANAPC2</u>	0.975	0.005	<u>GPR153</u>
0.959	0.004	<u>TMEM57</u>	0.975	0.005	<u>MCFD2</u>
0.959	0.005	<u>RPL23A</u>	0.976	0.006	<u>ANK1</u>
0.958	0.005	<u>AIFM1</u>	0.976	0.006	<u>RAB2A</u>
0.959	0.006	<u>RPL13A</u>	0.974	0.005	<u>SMC2</u>
0.957	0.005	<u>RPL36A</u>	0.974	0.005	<u>TMEM176A</u>
0.957	0.005	<u>TUBD1</u>	0.977	0.007	<u>RDH11</u>
0.957	0.005	<u>HMGN1</u>	0.974	0.005	<u>GGT1</u>
0.958	0.006	<u>VEZF1</u>	0.974	0.005	<u>TMEM59L</u>
0.956	0.005	<u>LPGAT1</u>	0.974	0.004	<u>PARN</u>
0.959	0.008	<u>UOCC</u>	0.974	0.005	<u>C14ORF79</u>
0.955	0.004	<u>USP39</u>	0.973	0.004	<u>FN3KRP</u>
0.955	0.005	<u>CACYBP</u>	0.974	0.005	<u>MTSS1</u>
0.954	0.003	<u>CUTC</u>	0.974	0.005	FLJ22184
0.959	0.009	<u>H3F3B</u>	0.973	0.004	<u>SLCO4A1</u>
0.955	0.005	<u>DERL1</u>	0.974	0.005	<u>BDNF</u>
0.955	0.005	<u>RAD23B</u>	0.973	0.004	<u>KCTD3</u>
0.956	0.007	<u>MRPL40</u>	0.973	0.005	<u>APOC1</u>
0.956	0.007	<u>AIMP2</u>	0.973	0.005	<u>VPREB3</u>
0.954	0.005	<u>CGRRF1</u>	0.972	0.005	<u>FZD6</u>
0.952	0.004	<u>ADAM17</u>	0.973	0.005	D4S234E
0.957	0.008	<u>ATP6V1H</u>	0.972	0.005	<u>PMEL</u>
0.952	0.004	C10ORF26	0.973	0.005	<u>PHF20L1</u>
0.952	0.005	<u>ARCN1</u>	0.972	0.004	<u>EGFL6</u>
0.952	0.005	<u>MAPT</u>	0.972	0.005	<u>NUBP1</u>
0.964	0.017	<u>BRD2</u>	0.974	0.007	<u>PPP2R1B</u>
0.951	0.005	<u>SERPINB6</u>	0.972	0.005	<u>PROZ</u>
0.951	0.005	<u>ATP5B</u>	0.974	0.007	<u>SH3GL3</u>
0.950	0.005	<u>RIPK2</u>	0.973	0.006	<u>DNASE1L2</u>
0.950	0.005	<u>KIF18A</u>	0.972	0.005	<u>CSNK2A2</u>
0.950	0.005	<u>BAG6</u>	0.972	0.005	PCBP3
0.947	0.004	<u>EMD</u>	0.971	0.004	LOC100506168
0.948	0.005	<u>SLBP</u>	0.971	0.005	<u>DMXL1</u>
0.947	0.005	<u>MLH1</u>	0.975	0.008	<u>TAPBPL</u>
0.954	0.013	<u>TGOLN2</u>	0.971	0.005	<u>PAF1</u>
0.946	0.005	<u>TOR3A</u>	0.972	0.005	<u>PSKH1</u>
0.946	0.005	<u>SHMT2</u>	0.971	0.005	<u>MUC2</u>
0.950	0.010	<u>SNRNP27</u>	0.971	0.004	ZNF180
0.947	0.006	<u>MARS</u>	0.971	0.005	<u>ARHGAP17</u>

0.948	0.009	<u>DUSP3</u>	0.972	0.006	<u>NUMA1</u>
0.946	0.007	<u>SNX11</u>	0.970	0.004	<u>GTF3C1</u>
0.947	0.008	<u>SUMO3</u>	0.971	0.005	<u>ESPN</u>
0.943	0.005	<u>SIGIRR</u>	0.970	0.005	<u>LPHN2</u>
0.943	0.007	<u>LAMP1</u>	0.971	0.005	<u>DLG1</u>
0.942	0.006	<u>UBE2D3</u>	0.971	0.005	<u>ARSI</u>
0.941	0.005	<u>TAF5</u>	0.968	0.003	<u>NDUFAB1</u>
0.940	0.005	<u>TIMM17B</u>	0.971	0.006	<u>SCN1A</u>
0.940	0.005	<u>SNX3</u>	0.974	0.008	<u>GIF</u>
0.940	0.005	<u>UCHL3</u>	0.970	0.005	<u>PER3</u>
0.939	0.005	<u>LOC388796</u>	0.973	0.008	<u>HTR1F</u>
0.942	0.009	<u>CDR2L</u>	0.970	0.005	<u>ARHGEF17</u>
0.938	0.005	<u>CHMP7</u>	0.969	0.004	<u>PTPRU</u>
0.936	0.007	<u>TRIM44</u>	0.971	0.006	<u>PRDX2</u>
0.934	0.005	<u>SH3BGRL3</u>	0.969	0.004	<u>SLC22A3</u>
0.938	0.009	<u>MYL6B</u>	0.970	0.006	<u>FAM86C1</u>
0.938	0.009	<u>RANGRF</u>	0.969	0.005	<u>SLC35A1</u>
0.936	0.010	<u>MTX2</u>	0.968	0.005	<u>CORO7</u>
0.937	0.011	<u>FUBP1</u>	0.971	0.008	<u>MAP3K8</u>
0.930	0.004	<u>WFS1</u>	0.968	0.005	<u>TELO2</u>
0.929	0.005	<u>CBFB</u>	0.968	0.005	<u>IBTK</u>
0.932	0.008	<u>ABCF2</u>	0.966	0.003	<u>GPX1</u>
0.934	0.012	<u>PDCD4</u>	0.968	0.005	<u>AQP7</u>
0.927	0.005	<u>ADH5</u>	0.967	0.005	<u>IGF2R</u>
0.926	0.005	<u>FAM171A1</u>	0.968	0.005	<u>C3ORF18</u>
0.929	0.008	<u>RPL22</u>	0.968	0.005	<u>RB1</u>
0.927	0.006	<u>UBA52</u>	0.967	0.005	<u>CHD9</u>
0.932	0.012	<u>UBE2D2</u>	0.967	0.005	<u>VPS33B</u>
0.925	0.005	<u>GTF2A2</u>	0.967	0.005	<u>HOXA7</u>
0.931	0.011	<u>SOX4</u>	0.968	0.006	<u>SCAPER</u>
0.930	0.011	<u>TMEM161A</u>	0.969	0.007	<u>ROD1</u>
0.923	0.005	<u>C9ORF40</u>	0.967	0.005	<u>PPP1CB</u>
0.929	0.013	<u>FAU</u>	0.967	0.005	<u>XBP1</u>
0.921	0.005	<u>MRPL16</u>	0.967	0.005	<u>CALCB</u>
0.921	0.005	<u>MORC2</u>	0.967	0.005	<u>BAIAP3</u>
0.936	0.022	<u>PSMG2</u>	0.966	0.004	<u>ANKRD49</u>
0.918	0.004	<u>WNT5A</u>	0.966	0.004	<u>GADD45G</u>
0.928	0.015	<u>ZNF207</u>	0.966	0.005	<u>ZC3H4</u>
0.920	0.008	<u>MAK16</u>	0.966	0.005	<u>TUBB4</u>
0.925	0.013	<u>KPNA6</u>	0.969	0.007	<u>TNFAIP2</u>
0.922	0.014	<u>PIGG</u>	0.966	0.005	<u>SF3B3</u>
0.917	0.009	<u>SMARCE1</u>	0.966	0.005	<u>ZNF93</u>
0.927	0.020	<u>DOM3Z</u>	0.970	0.008	<u>TUBAL3</u>
0.917	0.012	<u>TMBIM6</u>	0.966	0.005	<u>PLAC1</u>
0.907	0.004	<u>CNPPD1</u>	0.966	0.005	<u>FASTKD2</u>
0.912	0.010	<u>ASPM</u>	0.965	0.005	<u>SCD5</u>
0.908	0.007	<u>C4ORF27</u>	0.964	0.004	<u>RPN1</u>

0.908	0.008	<u>DDX50</u>	0.966	0.005	<u>PRODH2</u>
0.912	0.012	<u>HLA-C</u>	0.964	0.004	<u>AP4M1</u>
0.908	0.010	<u>LSM7</u>	0.967	0.007	<u>FAM125B</u>
0.906	0.010	<u>MRPS18B</u>	0.965	0.005	<u>GNAZ</u>
0.908	0.012	<u>BSDC1</u>	0.964	0.004	<u>CDC42BPB</u>
0.905	0.009	<u>LEPROTL1</u>	0.968	0.008	<u>NPPA</u>
0.908	0.012	<u>TXLNA</u>	0.967	0.007	<u>CXCR4</u>
0.899	0.005	<u>PGRMC2</u>	0.964	0.004	<u>ACADL</u>
0.898	0.005	<u>PFKM</u>	0.965	0.005	<u>GNB2</u>
0.908	0.015	<u>STK25</u>	0.969	0.010	<u>MUC3A</u>
0.897	0.005	<u>PARP4</u>	0.967	0.008	<u>MASP2</u>
0.906	0.014	<u>WDTC1</u>	0.967	0.008	<u>TAF9B</u>
0.914	0.023	<u>TOMM20</u>	0.968	0.009	<u>VIL1</u>
0.899	0.008	<u>CKAP5</u>	0.964	0.005	<u>CDCP1</u>
0.904	0.013	<u>NUDT9</u>	0.965	0.006	<u>HN1L</u>
0.901	0.013	<u>YKT6</u>	0.967	0.008	<u>PLAG1</u>
0.892	0.004	<u>APPL1</u>	0.964	0.005	<u>VAPB</u>
0.893	0.006	<u>SMYD5</u>	0.964	0.005	<u>SLC17A6</u>
0.916	0.031	<u>TTC3</u>	0.964	0.005	<u>NEFH</u>
0.898	0.014	<u>RPL35</u>	0.964	0.005	<u>PSD3</u>
0.900	0.017	<u>SORBS3</u>	0.964	0.005	<u>RAPGEF2</u>
0.895	0.012	<u>PTCD3</u>	0.964	0.005	<u>RSU1</u>
0.892	0.009	<u>WDR18</u>	0.963	0.005	<u>ERCC6L</u>
0.897	0.014	<u>RPS27A</u>	0.963	0.005	<u>TRAF3IP3</u>
0.895	0.013	<u>PTPN3</u>	0.966	0.008	<u>CAPN6</u>
0.901	0.019	<u>ATG4B</u>	0.965	0.007	<u>CAPN5</u>
0.897	0.016	<u>PGRMC1</u>	0.962	0.004	<u>SETD3</u>
0.895	0.014	<u>FAM32A</u>	0.963	0.005	<u>FAM70A</u>
0.890	0.009	<u>UBL4A</u>	0.962	0.005	<u>SRRM1</u>
0.899	0.019	<u>PHB</u>	0.962	0.005	<u>ETS1</u>
0.894	0.015	<u>VBP1</u>	0.962	0.004	<u>SSB</u>
0.891	0.013	<u>RPL30</u>	0.962	0.005	<u>ZNF512B</u>
0.883	0.005	<u>CCDC22</u>	0.962	0.005	<u>TIPARP</u>
0.896	0.017	<u>EIF3G</u>	0.962	0.005	<u>MTHFSD</u>
0.892	0.014	<u>CCNB1IP1</u>	0.961	0.004	<u>CISH</u>
0.893	0.017	<u>MAP4</u>	0.963	0.006	<u>TBC1D9B</u>
0.880	0.007	<u>GNG12</u>	0.964	0.007	<u>MEFV</u>
0.880	0.008	<u>ZNF576</u>	0.965	0.009	<u>ATXN3</u>
0.887	0.015	<u>LRRC59</u>	0.965	0.008	<u>SLC6A7</u>
0.878	0.007	<u>EPB41L2</u>	0.967	0.011	<u>RIMBP2</u>
0.882	0.012	<u>XPO7</u>	0.965	0.009	<u>STOML1</u>
0.893	0.023	<u>PTPN2</u>	0.961	0.005	<u>ARF6</u>
0.883	0.014	<u>NFKBIA</u>	0.961	0.005	<u>TCL1A</u>
0.884	0.019	<u>AQP3</u>	0.961	0.005	<u>LOC100129250</u>
0.882	0.017	<u>NUDT1</u>	0.961	0.005	<u>RLN1</u>
0.883	0.019	<u>STMN1</u>	0.963	0.007	<u>MS4A1</u>
0.886	0.024	<u>SUGP2</u>	0.961	0.005	<u>UBR2</u>

0.884	0.022	<u>LUC7L3</u>	0.961	0.005	<u>SOX3</u>
0.879	0.018	<u>CCNF</u>	0.960	0.005	<u>IVNS1ABP</u>
0.875	0.015	<u>FAM60A</u>	0.960	0.005	<u>FAM63B</u>
0.872	0.014	<u>IARS</u>	0.960	0.005	<u>FBXL4</u>
0.867	0.012	<u>SF3A3</u>	0.964	0.009	<u>PTPN21</u>
0.873	0.019	<u>RPL7A</u>	0.961	0.007	<u>CEBPD</u>
0.874	0.021	<u>FNTA</u>	0.965	0.010	<u>ADRBK2</u>
0.870	0.017	<u>TSPAN3</u>	0.959	0.005	<u>DDIT4</u>
0.870	0.018	<u>NCK1</u>	0.969	0.015	<u>C19ORF2</u>
0.876	0.024	<u>PUS7</u>	0.960	0.007	<u>PIN1P1</u>
0.867	0.016	<u>TCEA2</u>	0.959	0.005	<u>C22ORF29</u>
0.860	0.009	<u>COG4</u>	0.961	0.007	<u>TRIM48</u>
0.859	0.010	<u>EXOSC5</u>	0.958	0.005	<u>HIST1H2AE</u>
0.866	0.016	<u>PTS</u>	0.960	0.007	<u>LASP1</u>
0.865	0.016	<u>FTL</u>	0.957	0.004	<u>BPTF</u>
0.878	0.029	<u>XRCC5</u>	0.965	0.012	<u>DACH1</u>
0.865	0.017	<u>MAST2</u>	0.957	0.004	<u>ENOPH1</u>
0.868	0.021	<u>CERS6</u>	0.956	0.004	<u>DUSP12</u>
0.856	0.012	<u>STX4</u>	0.960	0.008	<u>INSRR</u>
0.862	0.021	<u>ATP6V0E1</u>	0.959	0.007	<u>IL1R2</u>
0.858	0.018	<u>RPL9</u>	0.961	0.009	<u>DNAJC4</u>
0.842	0.008	<u>PTGES2</u>	0.958	0.005	<u>MYO1D</u>
0.850	0.021	<u>ABHD10</u>	0.961	0.008	<u>IL18</u>
0.850	0.023	<u>RPS12</u>	0.959	0.007	<u>C2ORF67</u>
0.852	0.027	<u>RPS4X</u>	0.957	0.005	<u>TOPORS</u>
0.844	0.022	<u>CSK</u>	0.961	0.009	<u>IPW</u>
0.848	0.027	<u>UBE2C</u>	0.957	0.005	<u>POGZ</u>
0.841	0.022	<u>C20ORF111</u>	0.958	0.006	<u>MMP15</u>
0.845	0.029	<u>PSMA2</u>	0.960	0.009	<u>RELN</u>
0.835	0.023	<u>TMEM93</u>	0.956	0.004	<u>EIF2S1</u>
0.830	0.020	<u>RPS13</u>	0.960	0.009	<u>BMP5</u>
0.840	0.031	<u>MED13</u>	0.956	0.005	<u>MIS18BP1</u>
0.822	0.017	<u>LOC100129361</u>	0.957	0.006	<u>DPF1</u>
0.832	0.028	<u>RPLP0</u>	0.958	0.008	<u>CDKN2C</u>
0.827	0.023	<u>EEF1A1</u>	0.954	0.003	<u>SEMA4D</u>
0.832	0.031	<u>TCEB1</u>	0.954	0.004	<u>CRP</u>
0.830	0.028	<u>RPSA</u>	0.955	0.005	<u>EIF3L</u>
0.814	0.014	<u>PLK1</u>	0.955	0.005	<u>TMEM100</u>
0.841	0.041	<u>NFE2L1</u>	0.954	0.005	<u>TMEM132A</u>
0.809	0.013	<u>RRP9</u>	0.958	0.009	<u>WDR25</u>
0.817	0.022	<u>RUFY1</u>	0.958	0.009	<u>ACSBG2</u>
0.830	0.037	<u>SURF1</u>	0.953	0.005	<u>PTCD1</u>
0.822	0.029	<u>RPL23</u>	0.955	0.007	<u>UGT2B28</u>
0.832	0.039	<u>CPT2</u>	0.953	0.005	<u>UBTD1</u>
0.819	0.026	<u>HLA-F</u>	0.953	0.005	<u>IDH3A</u>
0.803	0.014	<u>RAB4A</u>	0.952	0.004	<u>FBXL8</u>
0.817	0.029	<u>MMADHC</u>	0.952	0.004	<u>PGS1</u>

0.810	0.028	<u>TBC1D9B</u>	0.952	0.004	<u>RFPL2</u>
0.814	0.034	<u>SLC25A46</u>	0.953	0.006	<u>SEC24D</u>
0.806	0.027	<u>ILKAP</u>	0.952	0.005	<u>SLC25A37</u>
0.805	0.026	<u>SNRNP40</u>	0.957	0.010	<u>INPP4A</u>
0.810	0.033	<u>PEX11A</u>	0.956	0.010	<u>CASP6</u>
0.797	0.024	<u>OXA1L</u>	0.950	0.004	<u>C11ORF58</u>
0.815	0.044	<u>LRRFIP1</u>	0.960	0.014	<u>PKNOX2</u>
0.799	0.030	<u>PSMB8</u>	0.954	0.008	<u>ANP32A-IT1</u>
0.800	0.033	<u>RHOT1</u>	0.955	0.009	<u>RNF186</u>
0.801	0.034	<u>RBM6</u>	0.955	0.009	<u>CASP10</u>
0.788	0.021	<u>TP53</u>	0.950	0.004	<u>CKB</u>
0.811	0.046	<u>ANAPC5</u>	0.953	0.008	<u>ANKRD36</u>
0.788	0.027	<u>ISOC2</u>	0.950	0.005	<u>DNMT3L</u>
0.794	0.033	<u>EEF1B2</u>	0.953	0.007	<u>SMG7</u>
0.784	0.027	<u>RPS29</u>	0.951	0.006	<u>FLJ13197</u>
0.809	0.054	<u>MPDZ</u>	0.951	0.006	<u>NDUFA5</u>
0.780	0.025	<u>RPL6</u>	0.956	0.011	<u>RNF24</u>
0.779	0.027	<u>MTCP1NB</u>	0.952	0.007	<u>EMR2</u>
0.777	0.025	<u>SESN1</u>	0.948	0.004	<u>ACAD8</u>
0.789	0.038	<u>NUP62</u>	0.954	0.010	<u>ZNF132</u>
0.770	0.020	<u>FJX1</u>	0.949	0.005	<u>SIM1</u>
0.774	0.027	<u>TCTA</u>	0.949	0.005	<u>TMEM22</u>
0.771	0.026	<u>PPIE</u>	0.958	0.014	<u>ARHGDIA</u>
0.787	0.044	<u>ARL6IP4</u>	0.957	0.013	<u>LOC440792</u>
0.789	0.048	<u>RPL17</u>	0.952	0.009	<u>TMPO</u>
0.772	0.035	<u>DDX56</u>	0.953	0.009	<u>TPD52</u>
0.800	0.065	<u>C8ORF33</u>	0.947	0.004	<u>ITM2B</u>
0.790	0.057	<u>THOC2</u>	0.955	0.012	<u>GLI1</u>
0.775	0.043	<u>BLVRA</u>	0.950	0.007	<u>FOXC2</u>
0.770	0.039	<u>UBE2S</u>	0.948	0.005	<u>GYG2</u>
0.763	0.038	<u>BNIP3</u>	0.948	0.005	<u>RXRG</u>
0.779	0.054	<u>NKTR</u>	0.957	0.014	<u>CSF2</u>
0.766	0.046	<u>RPL38</u>	0.953	0.011	<u>DSC1</u>
0.752	0.035	<u>RPL24</u>	0.952	0.010	<u>RREB1</u>
0.758	0.045	<u>SMARCA4</u>	0.947	0.006	<u>ZNF177</u>
0.729	0.018	<u>RRP1</u>	0.945	0.004	<u>GMFG</u>
0.736	0.027	<u>HAUS7</u>	0.946	0.005	<u>EPHA4</u>
0.743	0.035	<u>SNX6</u>	0.950	0.009	<u>SLC1A6</u>
0.743	0.036	<u>DUSP6</u>	0.949	0.008	<u>TPO</u>
0.745	0.050	<u>UQCR11</u>	0.951	0.010	<u>NMT2</u>
0.733	0.045	<u>EEF1G</u>	0.947	0.006	<u>LITD1</u>
0.756	0.068	<u>HMOX2</u>	0.948	0.008	<u>ZNF493</u>
0.730	0.047	<u>ECH1</u>	0.945	0.005	<u>MIOS</u>
0.741	0.060	<u>HNRNPA1</u>	0.947	0.007	<u>CD47</u>
0.719	0.048	<u>GADD45A</u>	0.944	0.004	<u>PSMA6</u>
0.732	0.066	<u>PAM16</u>	0.945	0.005	<u>AP1AR</u>
0.726	0.060	<u>RPS20</u>	0.945	0.005	<u>SNRPN</u>

0.719	0.059	<u>PDCL</u>	0.951	0.012	<u>FLJ20712</u>
0.720	0.062	<u>SMNDC1</u>	0.950	0.011	<u>NADSYN1</u>
0.702	0.049	<u>RPL13</u>	0.944	0.005	<u>CDX1</u>
0.693	0.041	<u>FLNB</u>	0.945	0.006	<u>EA2F2</u>
0.702	0.054	<u>RPS9</u>	0.944	0.005	<u>ZNF43</u>
0.692	0.045	<u>GTF2E2</u>	0.948	0.009	<u>SNAPC3</u>
0.686	0.041	<u>NCK2</u>	0.947	0.009	<u>TTC28</u>
0.686	0.051	<u>PSMD3</u>	0.950	0.012	<u>HNF4G</u>
0.695	0.061	<u>CLSTN1</u>	0.947	0.010	<u>CTNNA1</u>
0.705	0.072	<u>STARD7</u>	0.942	0.005	<u>C4ORF29</u>
0.685	0.053	<u>DCK</u>	0.942	0.005	<u>EFHC1</u>
0.705	0.074	<u>NACA</u>	0.948	0.011	<u>HPS4</u>
0.683	0.053	<u>NMT1</u>	0.945	0.009	<u>KDELR2</u>
0.692	0.066	<u>RPS16</u>	0.947	0.011	<u>TRIM17</u>
0.678	0.055	<u>MAPK9</u>	0.952	0.016	<u>NUCB1</u>
0.682	0.062	<u>CHERP</u>	0.949	0.013	<u>RASL10A</u>
0.664	0.046	<u>NT5DC2</u>	0.946	0.010	<u>INVS</u>
0.676	0.058	<u>PARP2</u>	0.943	0.007	<u>CYFIP2</u>
0.670	0.071	<u>YTHDF1</u>	0.944	0.009	<u>FUT7</u>
0.651	0.053	<u>GEMIN4</u>	0.945	0.010	<u>ACAA2</u>
0.653	0.059	<u>ARFIP2</u>	0.941	0.007	<u>MARK3</u>
0.673	0.081	<u>TSGA10</u>	0.938	0.003	<u>JTB</u>
0.668	0.081	<u>RPS2</u>	0.946	0.012	<u>DZIP1</u>
0.649	0.062	<u>CHKB</u>	0.947	0.013	<u>APC</u>
0.656	0.075	<u>AURKA</u>	0.943	0.009	<u>SCAI</u>
0.633	0.055	<u>GALE</u>	0.941	0.007	<u>SLC9A2</u>
0.651	0.074	<u>CHN1</u>	0.938	0.004	<u>HERPUD1</u>
0.666	0.092	<u>LINC00472</u>	0.945	0.011	<u>KIR2DL1</u>
0.638	0.064	<u>FBXO7</u>	0.945	0.011	<u>PTPN7</u>
0.668	0.098	<u>ATIC</u>	0.953	0.020	<u>GRPR</u>
0.597	0.027	<u>C22ORF36</u>	0.938	0.005	<u>PGF</u>
0.641	0.077	<u>H2BFS</u>	0.941	0.008	<u>CCDC121</u>
0.667	0.110	<u>GAPVD1</u>	0.938	0.005	<u>TCIRG1</u>
0.640	0.083	<u>UBA2</u>	0.939	0.007	<u>HIST3H3</u>
0.605	0.056	<u>FOXO3</u>	0.937	0.005	<u>GMFB</u>
0.627	0.079	<u>PHGDH</u>	0.937	0.005	<u>CITED2</u>
0.640	0.096	<u>DAG1</u>	0.937	0.005	<u>RECQL</u>
0.633	0.089	<u>RPL14</u>	0.946	0.014	<u>ACRV1</u>
0.659	0.116	<u>ZNHIT6</u>	0.941	0.009	<u>EPHA7</u>
0.635	0.093	<u>EHHADH</u>	0.940	0.009	<u>ARAP1</u>
0.617	0.086	<u>PDS5A</u>	0.936	0.005	<u>YEATS4</u>
0.606	0.076	<u>MRPS27</u>	0.935	0.005	<u>HAUS6</u>
0.608	0.086	<u>NENF</u>	0.944	0.013	<u>CDH11</u>
0.588	0.067	<u>ARHGAP15</u>	0.946	0.015	<u>LCN1</u>
0.594	0.085	<u>PLCB3</u>	0.941	0.010	<u>TRIL</u>
0.601	0.105	<u>EPRS</u>	0.935	0.004	<u>TCEB1</u>
0.605	0.111	<u>ATP5G3</u>	0.935	0.005	<u>DBNDD1</u>

0.532	0.038	<u>TRIM17</u>	0.936	0.006	<u>TEP1</u>
0.591	0.100	<u>COL9A3</u>	0.933	0.004	<u>TMPRSS2</u>
0.572	0.083	<u>UBQLN2</u>	0.936	0.007	<u>HLA-DPB1</u>
0.590	0.103	<u>PDCD5</u>	0.939	0.010	<u>LRRC48</u>
0.558	0.077	<u>PRG4</u>	0.933	0.005	<u>PLEKHA8P1</u>
0.555	0.078	<u>DNAJA4</u>	0.940	0.012	<u>DUS2L</u>
0.566	0.090	<u>CLCN5</u>	0.946	0.018	<u>HOXC5</u>
0.548	0.075	<u>PPP2R5A</u>	0.936	0.009	<u>CAPN9</u>
0.577	0.110	<u>PSAT1</u>	0.931	0.003	<u>CTNBL1</u>
0.576	0.116	<u>CAPNS1</u>	0.931	0.005	<u>DYNLT1</u>
0.595	0.135	<u>PSMA7</u>	0.941	0.015	<u>NAALAD2</u>
0.554	0.096	<u>RNMT</u>	0.942	0.017	<u>FNTB</u>
0.606	0.152	<u>SOD3</u>	0.932	0.007	<u>UBN1</u>
0.557	0.106	<u>DSG2</u>	0.939	0.013	<u>HOXA3</u>
0.550	0.100	<u>RBM15B</u>	0.940	0.015	<u>INA</u>
0.554	0.106	LOC100286895	0.941	0.016	<u>CADM3</u>
0.573	0.127	<u>PPP1R7</u>	0.935	0.011	<u>NEURL</u>
0.539	0.102	<u>CALM3</u>	0.941	0.017	<u>POU2F1</u>
0.514	0.080	<u>APLNR</u>	0.938	0.014	<u>MCM4</u>
0.525	0.094	<u>IER3</u>	0.933	0.010	<u>CREB3L1</u>
0.527	0.098	<u>HERPUD1</u>	0.930	0.007	<u>NVL</u>
0.530	0.102	<u>TMEM5</u>	0.929	0.007	<u>MAGI1</u>
0.552	0.128	<u>MBNL1</u>	0.932	0.009	<u>PRKCI</u>
0.527	0.106	<u>CTNNAL1</u>	0.930	0.008	<u>PPP4R2</u>
0.525	0.105	<u>CEACAM6</u>	0.939	0.017	<u>GUCY2C</u>
0.555	0.138	<u>NUDCD3</u>	0.930	0.008	<u>MOSPD3</u>
0.573	0.156	<u>MPZ</u>	0.926	0.005	<u>NUCB2</u>
0.517	0.101	<u>SLC25A13</u>	0.935	0.014	<u>CD300C</u>
0.536	0.121	<u>PLP1</u>	0.930	0.009	LOC729799
0.527	0.116	<u>WASF3</u>	0.933	0.013	<u>EXOC7</u>
0.550	0.144	<u>UNKL</u>	0.928	0.008	<u>NGLY1</u>
0.525	0.119	<u>KLHDC2</u>	0.926	0.006	<u>LGI1</u>
0.556	0.151	<u>KIAA1024</u>	0.933	0.014	<u>SRSF7</u>
0.523	0.126	<u>S100A13</u>	0.925	0.006	<u>NEDD4L</u>
0.517	0.123	<u>UBR7</u>	0.925	0.007	<u>SRD5A2</u>
0.529	0.137	<u>KRT5</u>	0.932	0.014	<u>GLCE</u>
0.526	0.135	<u>KEAP1</u>	0.925	0.008	<u>HIST1H2BM</u>
0.577	0.188	LOC100127972	0.931	0.013	<u>CSRNP3</u>
0.542	0.155	<u>KDEL2</u>	0.922	0.004	<u>OR51E2</u>
0.503	0.123	<u>XPNPEP1</u>	0.930	0.012	<u>PYGL</u>
0.510	0.135	<u>SLC26A4</u>	0.932	0.014	<u>ATXN7</u>
0.508	0.136	<u>ANXA7</u>	0.929	0.011	<u>GLTSCR1</u>
0.515	0.148	<u>TSN</u>	0.935	0.018	<u>ARRB1</u>
0.519	0.155	<u>NISCH</u>	0.924	0.008	<u>CHST15</u>
0.539	0.179	<u>CD19</u>	0.942	0.026	<u>DMBT1</u>
0.514	0.164	<u>SET</u>	0.926	0.009	<u>PEG3</u>
0.508	0.165	<u>PKD4</u>	0.935	0.019	<u>ILVBL</u>

	0.932	0.016	<u>SATB2</u>
	0.933	0.017	<u>PDGFB</u>
	0.932	0.016	<u>AIM2</u>
	0.920	0.005	<u>PTBP2</u>
	0.926	0.011	<u>ELK4</u>
	0.927	0.012	<u>MBIP</u>
	0.922	0.007	<u>ICAM3</u>
	0.932	0.018	<u>LAT2</u>
	0.928	0.014	<u>GALNT8</u>
	0.930	0.016	<u>MYCN</u>
	0.926	0.013	<u>S100A3</u>
	0.931	0.017	<u>HNFA4</u>
	0.923	0.010	<u>ANKRD17</u>
	0.918	0.005	<u>XPO4</u>
	0.924	0.012	<u>MAN2A1</u>
	0.918	0.006	<u>ANXA2P3</u>
	0.922	0.010	<u>NCKAP1</u>
	0.929	0.017	<u>A4GALT</u>
	0.927	0.016	<u>KCNA4</u>
	0.928	0.017	<u>ACCN1</u>
	0.922	0.012	<u>PDE5A</u>
	0.926	0.016	<u>PPIL2</u>
	0.920	0.011	<u>TMEM231</u>
	0.918	0.009	<u>LRRC8E</u>
	0.929	0.021	<u>SLC16A8</u>
	0.913	0.005	<u>ZNF124</u>
	0.912	0.005	<u>UBE2D3</u>
	0.920	0.013	<u>CHRNA4</u>
	0.922	0.016	<u>ZBTB1</u>
	0.915	0.009	<u>RRAGA</u>
	0.912	0.007	<u>KLK14</u>
	0.923	0.018	<u>TSPAN9</u>
	0.919	0.014	<u>PBX1</u>
	0.925	0.020	<u>SLC26A3</u>
	0.908	0.003	<u>MFAP1</u>
	0.918	0.013	<u>NUP133</u>
	0.923	0.020	<u>GPR182</u>
	0.922	0.021	<u>SPRYD7</u>
	0.908	0.007	<u>WSCD1</u>
	0.905	0.004	<u>TMEM135</u>
	0.913	0.013	<u>PPP1R12A</u>
	0.923	0.023	<u>IFT27</u>
	0.919	0.019	<u>MET</u>
	0.921	0.022	<u>CNGB3</u>
	0.916	0.017	<u>BCLAF1</u>
	0.914	0.016	<u>TAS2R7</u>
	0.914	0.016	<u>PCDHB11</u>

	0.910	0.012	<u>KIF3B</u>
	0.917	0.019	<u>NPIPL3</u>
	0.915	0.018	<u>GPLD1</u>
	0.918	0.021	<u>GAS2L1</u>
	0.917	0.020	<u>PKP2</u>
	0.908	0.012	<u>ATXN7L1</u>
	0.911	0.015	<u>BMP1</u>
	0.910	0.015	<u>GPRC5B</u>
	0.902	0.007	<u>SMC5</u>
	0.899	0.004	<u>CD2AP</u>
	0.900	0.006	<u>FOS</u>
	0.921	0.028	<u>AMPD1</u>
	0.910	0.016	<u>HIST1H3I</u>
	0.912	0.018	<u>SKP2</u>
	0.905	0.012	<u>ZNF185</u>
	0.901	0.009	<u>CCL11</u>
	0.902	0.010	<u>ERG</u>
	0.916	0.025	<u>PAQR5</u>
	0.909	0.017	<u>BRE</u>
	0.911	0.019	<u>ADORA1</u>
	0.900	0.010	<u>B3GALNT1</u>
	0.912	0.022	<u>LINC00483</u>
	0.903	0.013	<u>CDKL1</u>
	0.899	0.010	<u>ALDH7A1</u>
	0.910	0.021	<u>SH2D3C</u>
	0.904	0.017	<u>TYR</u>
	0.902	0.015	<u>KIAA0564</u>
	0.908	0.021	<u>STAG3L4</u>
	0.903	0.016	<u>NTRK1</u>
	0.910	0.023	<u>KAZN</u>
	0.900	0.014	<u>RPH3A</u>
	0.913	0.027	<u>CPLX2</u>
	0.911	0.026	<u>ANGPTL4</u>
	0.898	0.013	<u>LINC00342</u>
	0.895	0.010	<u>DSC2</u>
	0.899	0.015	<u>UCP2</u>
	0.900	0.016	<u>CLDN15</u>
	0.896	0.013	<u>KIAA1109</u>
	0.888	0.005	<u>PRSS8</u>
	0.887	0.005	<u>PPP2R3C</u>
	0.905	0.024	<u>SPAST</u>
	0.897	0.016	<u>NRXN2</u>
	0.899	0.019	<u>RUNX2</u>
	0.892	0.013	<u>PAX6</u>
	0.905	0.025	<u>MLLT10</u>
	0.887	0.008	<u>FAM172A</u>
	0.897	0.018	<u>PRDM2</u>

	0.896	0.018	<u>CACNA2D1</u>
	0.904	0.026	<u>EIF5A</u>
	0.894	0.016	<u>ZFYVE26</u>
	0.897	0.019	<u>NFASC</u>
	0.897	0.020	<u>CHRNA10</u>
	0.901	0.024	<u>C6ORF105</u>
	0.907	0.030	<u>PRKAR1A</u>
	0.890	0.014	<u>FKBP4</u>
	0.896	0.020	<u>TRRAP</u>
	0.897	0.021	<u>DLL3</u>
	0.900	0.025	<u>PEX5</u>
	0.897	0.022	<u>IL24</u>
	0.879	0.005	<u>KIF18A</u>
	0.880	0.006	<u>FKBP1B</u>
	0.892	0.020	<u>DCAF17</u>
	0.892	0.020	<u>TSPAN2</u>
	0.886	0.014	<u>HK1</u>
	0.888	0.016	<u>TERT</u>
	0.891	0.020	<u>AFF2</u>
	0.898	0.027	<u>HNRNPH1</u>
	0.894	0.023	<u>GCK</u>
	0.887	0.017	<u>RAB27B</u>
	0.893	0.024	<u>THBS1</u>
	0.899	0.030	<u>VPS4B</u>
	0.889	0.021	<u>TRPC4</u>
	0.889	0.022	<u>CFHR4</u>
	0.890	0.024	<u>CA3</u>
	0.876	0.011	<u>JUNB</u>
	0.880	0.015	<u>BTN3A3</u>
	0.879	0.016	<u>KCTD9</u>
	0.886	0.022	<u>ZFY</u>
	0.894	0.032	<u>HCRT</u>
	0.896	0.035	<u>NCR3</u>
	0.896	0.035	<u>EMILIN2</u>
	0.880	0.019	<u>SLC45A2</u>
	0.878	0.018	<u>WDHD1</u>
	0.884	0.024	<u>HGD</u>
	0.869	0.009	<u>SMAP1</u>
	0.877	0.019	<u>CCDC134</u>
	0.898	0.040	<u>STXBP5L</u>
	0.883	0.025	<u>HOXD3</u>
	0.888	0.031	<u>CCDC30</u>
	0.879	0.021	<u>RAX</u>
	0.879	0.024	<u>PLA2G10</u>
	0.885	0.030	<u>PSORS1C2</u>
	0.881	0.027	<u>KLF8</u>
	0.869	0.016	<u>PGLYRP1</u>

	0.873	0.019	<u>LEP</u>
	0.873	0.019	<u>VSTM4</u>
	0.882	0.029	<u>ZNF536</u>
	0.870	0.018	<u>DKFZP547G183</u>
	0.874	0.022	<u>CTBP2</u>
	0.873	0.022	<u>ALDH3B2</u>
	0.866	0.015	<u>HOPX</u>
	0.869	0.019	<u>SEC22A</u>
	0.860	0.010	<u>RTN4</u>
	0.876	0.026	<u>MAPK10</u>
	0.869	0.020	<u>RAD23B</u>
	0.879	0.030	<u>SPACA1</u>
	0.863	0.014	<u>FAM179B</u>
	0.883	0.034	<u>GUCY1B2</u>
	0.874	0.025	<u>SLC25A16</u>
	0.864	0.015	<u>IL12B</u>
	0.870	0.022	<u>MED6</u>
	0.886	0.039	<u>FAM198B</u>
	0.860	0.014	<u>TOLLIP</u>
	0.868	0.022	<u>RAB4A</u>
	0.874	0.028	<u>ARFIP1</u>
	0.866	0.019	<u>ITPR2</u>
	0.865	0.019	<u>SPTLC3</u>
	0.872	0.026	<u>ADARB2</u>
	0.871	0.025	<u>FAM204A</u>
	0.871	0.026	<u>FLJ13224</u>
	0.866	0.021	<u>KLRC4</u>
	0.872	0.028	<u>SYT5</u>
	0.853	0.010	<u>LHFPL2</u>
	0.879	0.036	<u>TGFB2</u>
	0.867	0.023	<u>SLC2A4</u>
	0.881	0.039	<u>BAIAP2</u>
	0.866	0.024	<u>SEC14L4</u>
	0.863	0.023	<u>CNTN5</u>
	0.868	0.028	<u>GJA5</u>
	0.860	0.020	<u>SLC26A4</u>
	0.864	0.024	<u>SH3TC2</u>
	0.844	0.005	<u>PGD</u>
	0.865	0.026	<u>B3GALT5</u>
	0.861	0.022	<u>HIST1H1T</u>
	0.867	0.028	<u>TPM3</u>
	0.859	0.020	<u>MGAT4A</u>
	0.861	0.023	<u>PCDHGA10</u>
	0.860	0.022	<u>SLC13A2</u>
	0.859	0.021	<u>MKNK1</u>
	0.869	0.031	<u>ATP9B</u>
	0.858	0.022	<u>PCDHGA3</u>

	0.863	0.027	<u>FOXN2</u>
	0.868	0.032	<u>CD1D</u>
	0.864	0.029	<u>AGPAT3</u>
	0.854	0.019	<u>NID2</u>
	0.855	0.020	<u>MAK</u>
	0.845	0.011	<u>RIT1</u>
	0.862	0.029	<u>ARFGEF2</u>
	0.868	0.036	<u>UBE2L6</u>
	0.864	0.032	<u>BAIAP2L2</u>
	0.861	0.030	<u>PRSS12</u>
	0.852	0.020	<u>TCN2</u>
	0.855	0.024	<u>PLXNA2</u>
	0.859	0.029	<u>TCHH</u>
	0.861	0.031	<u>FGD2</u>
	0.854	0.024	<u>MDM2</u>
	0.856	0.027	<u>ZNF214</u>
	0.870	0.040	<u>AVIL</u>
	0.853	0.025	<u>PLK4</u>
	0.852	0.024	<u>STAT3</u>
	0.855	0.027	<u>TPD52L1</u>
	0.856	0.030	<u>LOC257152</u>
	0.855	0.028	<u>PURG</u>
	0.871	0.048	<u>BCAT2</u>
	0.853	0.030	<u>DAPK1</u>
	0.856	0.033	<u>CHD4</u>
	0.857	0.034	<u>SCNN1G</u>
	0.857	0.035	<u>QPCTL</u>
	0.828	0.006	<u>TRIM36</u>
	0.840	0.020	<u>MYBL2</u>
	0.838	0.018	<u>RASIP1</u>
	0.851	0.031	<u>L3MBTL1</u>
	0.845	0.026	<u>POU3F3</u>
	0.846	0.028	<u>PTK2B</u>
	0.839	0.021	<u>TNIP3</u>
	0.838	0.020	<u>SPTBN4</u>
	0.853	0.035	<u>CEACAM7</u>
	0.859	0.042	<u>CELF3</u>
	0.838	0.022	<u>SPG21</u>
	0.847	0.031	<u>TMC7</u>
	0.839	0.024	<u>GYPE</u>
	0.838	0.023	<u>C8ORF84</u>
	0.839	0.024	<u>HMGA2</u>
	0.848	0.033	<u>EBF2</u>
	0.840	0.026	<u>CACNA1C</u>
	0.837	0.025	<u>ERGIC3</u>
	0.841	0.031	<u>PTGER1</u>
	0.844	0.034	<u>LIN7C</u>

	0.835	0.025	<u>SCGB1D1</u>
	0.851	0.042	<u>TAGLN3</u>
	0.843	0.034	<u>HIST1H1A</u>
	0.834	0.026	<u>CYP7A1</u>
	0.828	0.021	<u>HYMAI</u>
	0.821	0.014	<u>BRD4</u>
	0.841	0.034	<u>PAR5</u>
	0.833	0.028	<u>TMEM212</u>
	0.845	0.040	<u>ARHGAP24</u>
	0.837	0.032	<u>SOCS7</u>
	0.835	0.033	<u>ARID3A</u>
	0.820	0.019	<u>KIAA0284</u>
	0.836	0.034	<u>EFCAB6</u>
	0.842	0.041	<u>DCAF4</u>
	0.822	0.022	<u>KCNJ15</u>
	0.833	0.033	<u>NKX2-5</u>
	0.834	0.034	<u>POU2F3</u>
	0.838	0.039	<u>RUFY3</u>
	0.836	0.037	<u>GPR85</u>
	0.838	0.039	<u>MYO1B</u>
	0.830	0.032	<u>FAM20B</u>
	0.825	0.028	<u>MCTP2</u>
	0.832	0.034	<u>UPF1</u>
	0.821	0.025	<u>TRA2A</u>
	0.820	0.024	<u>SEPT8</u>
	0.828	0.032	<u>OR7E24</u>
	0.840	0.045	<u>IRS4</u>
	0.817	0.022	<u>PDZD7</u>
	0.831	0.037	<u>KLHL28</u>
	0.833	0.039	<u>CXCL3</u>
	0.821	0.029	<u>ZNF204P</u>
	0.824	0.032	<u>SRSF11</u>
	0.821	0.030	<u>STAMBPL1</u>
	0.819	0.028	<u>LOR</u>
	0.820	0.030	<u>ITGA1</u>
	0.830	0.040	<u>YWHAE</u>
	0.827	0.037	<u>LOC729164</u>
	0.829	0.040	<u>TCTN1</u>
	0.828	0.038	<u>ZNF688</u>
	0.798	0.009	<u>DDA1</u>
	0.826	0.037	<u>CER1</u>
	0.835	0.047	<u>TMCO1</u>
	0.833	0.045	<u>PMP22</u>
	0.824	0.036	<u>CD40</u>
	0.821	0.034	<u>PAX1</u>
	0.820	0.033	<u>POU2F2</u>
	0.818	0.033	<u>GALNT3</u>

	0.819	0.033	<u>FGFR4</u>
	0.808	0.023	<u>USP53</u>
	0.828	0.043	<u>NR5A2</u>
	0.789	0.005	<u>NCAPG</u>
	0.820	0.036	<u>MAPRE3</u>
	0.826	0.042	<u>PP13</u>
	0.836	0.052	<u>PLA2G2F</u>
	0.807	0.023	<u>FSCN2</u>
	0.819	0.036	<u>DERA</u>
	0.813	0.030	<u>GABRG3</u>
	0.810	0.028	<u>LRRC37A4</u>
	0.831	0.051	<u>SEZ6L</u>
	0.816	0.036	<u>HIST1H2BN</u>
	0.809	0.030	<u>HCCS</u>
	0.805	0.026	<u>OR7E14P</u>
	0.812	0.033	<u>ALS2CR8</u>
	0.818	0.039	<u>AHCYL2</u>
	0.821	0.043	<u>LRRC1</u>
	0.808	0.031	<u>VGLL3</u>
	0.819	0.043	<u>VN1R1</u>
	0.827	0.052	<u>PKP1</u>
	0.819	0.044	<u>KRIT1</u>
	0.799	0.025	<u>GNRH1</u>
	0.808	0.035	<u>LBX1</u>
	0.817	0.044	<u>TECTA</u>
	0.806	0.033	<u>CLASP2</u>
	0.800	0.028	<u>BRCA2</u>
	0.813	0.041	<u>CRB1</u>
	0.819	0.048	<u>RAB28</u>
	0.802	0.031	<u>BBS7</u>
	0.800	0.029	<u>MLANA</u>
	0.790	0.020	<u>SEPX1</u>
	0.834	0.065	<u>NR0B1</u>
	0.816	0.047	<u>SLC6A16</u>
	0.803	0.034	<u>ZBTB6</u>
	0.813	0.045	<u>HNRNPD</u>
	0.807	0.039	<u>FOXD2</u>
	0.802	0.035	<u>DOPEY1</u>
	0.810	0.043	<u>ARSD</u>
	0.795	0.028	<u>LIMK2</u>
	0.804	0.037	<u>HOXB8</u>
	0.809	0.044	<u>KCNC1</u>
	0.807	0.042	<u>EPHB1</u>
	0.805	0.040	<u>ICA1</u>
	0.812	0.048	<u>MAGEC3</u>
	0.799	0.035	<u>C11ORF63</u>
	0.800	0.037	<u>ELP4</u>

	0.820	0.057	<u>ZBED4</u>
	0.802	0.039	<u>RFC1</u>
	0.798	0.036	<u>FHL2</u>
	0.816	0.054	<u>TRIM15</u>
	0.798	0.036	<u>CEP97</u>
	0.802	0.040	<u>SEMA3F</u>
	0.805	0.044	<u>RAB14</u>
	0.817	0.056	<u>SLC4A7</u>
	0.816	0.055	C1ORF68
	0.789	0.029	EFCAB1
	0.808	0.047	ZFP2
	0.804	0.045	<u>MINK1</u>
	0.795	0.037	RPS2P45
	0.820	0.062	<u>TPA</u>
	0.792	0.036	<u>EMX2</u>
	0.796	0.039	TRDN
	0.800	0.044	<u>PYHIN1</u>
	0.789	0.033	<u>GPR77</u>
	0.795	0.039	<u>LCMT2</u>
	0.802	0.047	<u>PVR</u>
	0.790	0.034	<u>LNPEP</u>
	0.790	0.035	<u>SNX13</u>
	0.801	0.047	PBOV1
	0.786	0.033	<u>NFATC4</u>
	0.795	0.042	<u>AFF4</u>
	0.810	0.057	<u>DEDD</u>
	0.820	0.068	<u>FSCN3</u>
	0.798	0.046	<u>PLIN2</u>
	0.790	0.039	<u>EVC</u>
	0.795	0.044	<u>SIK2</u>
	0.782	0.031	<u>SAGE1</u>
	0.758	0.007	<u>ORMDL2</u>
	0.788	0.037	<u>GPR97</u>
	0.807	0.056	<u>FAM115A</u>
	0.786	0.038	<u>BMP4</u>
	0.797	0.049	SOX14
	0.793	0.045	<u>ATOH1</u>
	0.804	0.057	WIZ
	0.791	0.044	<u>COL6A1</u>
	0.793	0.046	<u>SPICE1</u>
	0.800	0.054	<u>NR4A1</u>
	0.802	0.057	<u>PDPR</u>
	0.802	0.058	<u>GOLGA6A</u>
	0.791	0.048	<u>CEACAM1</u>
	0.789	0.046	<u>NOX3</u>
	0.792	0.051	<u>TGM5</u>
	0.781	0.040	<u>AGBL2</u>

	0.782	0.043	GRIN2D
	0.807	0.068	<u>AHI1</u>
	0.785	0.046	PCDHB1
	0.772	0.033	<u>SMG1</u>
	0.782	0.045	<u>NCBP1</u>
	0.792	0.055	<u>NONO</u>
	0.774	0.037	<u>CCDC70</u>
	0.769	0.033	<u>TGFB3</u>
	0.783	0.047	<u>TSHR</u>
	0.793	0.060	<u>MT4</u>
	0.784	0.051	<u>ADRA1B</u>
	0.786	0.053	<u>CD80</u>
	0.773	0.041	<u>TTLL3</u>
	0.776	0.044	<u>PTPRN2</u>
	0.781	0.049	IGHV5-78
	0.800	0.069	<u>IFNA17</u>
	0.772	0.041	<u>IMPAD1</u>
	0.770	0.039	<u>SMC4</u>
	0.771	0.041	<u>COG5</u>
	0.788	0.059	SEC14L5
	0.777	0.048	UBQLN3
	0.780	0.052	<u>TMEM5</u>
	0.777	0.050	<u>AATK</u>
	0.802	0.075	<u>CRCP</u>
	0.766	0.039	<u>FER</u>
	0.784	0.057	<u>HNRNPUL2</u>
	0.775	0.049	<u>DENND4A</u>
	0.773	0.047	<u>SETD2</u>
	0.765	0.041	<u>TMX4</u>
	0.791	0.068	ATXN8OS
	0.779	0.057	<u>CACNB4</u>
	0.759	0.038	<u>ZBTB7C</u>
	0.774	0.054	<u>MYO5A</u>
	0.782	0.063	<u>PRKDC</u>
	0.772	0.053	<u>POLR3G</u>
	0.756	0.037	<u>EIF3M</u>
	0.775	0.058	<u>GGA1</u>
	0.768	0.051	<u>DEC1</u>
	0.769	0.053	<u>SHH</u>
	0.757	0.042	<u>SYK</u>
	0.763	0.047	<u>PKD2L2</u>
	0.774	0.059	<u>VPREB1</u>
	0.754	0.039	<u>CCDC87</u>
	0.763	0.049	<u>C16ORF70</u>
	0.772	0.058	<u>CADPS</u>
	0.781	0.067	<u>MRE11A</u>
	0.762	0.048	<u>HNRPDL</u>

	0.775	0.061	<u>CAMKMT</u>
	0.759	0.046	<u>PDE3A</u>
	0.773	0.060	<u>KRTAP1-3</u>
	0.778	0.065	<u>TP53I11</u>
	0.759	0.047	<u>DCT</u>
	0.771	0.060	<u>SCN7A</u>
	0.765	0.053	<u>KIF2A</u>
	0.780	0.069	<u>COL4A6</u>
	0.747	0.036	<u>COL3A1</u>
	0.758	0.047	<u>EXPH5</u>
	0.778	0.067	<u>TUBGCP5</u>
	0.719	0.008	<u>HSD17B11</u>
	0.766	0.056	<u>CLMN</u>
	0.758	0.048	<u>TRADD</u>
	0.757	0.047	<u>VPS72</u>
	0.761	0.052	<u>TCF3</u>
	0.764	0.055	<u>LMAN1</u>
	0.775	0.065	<u>TMEM144</u>
	0.757	0.047	<u>NOV</u>
	0.749	0.040	<u>DDX17</u>
	0.770	0.061	<u>SERPINB9</u>
	0.760	0.052	<u>PDCD6</u>
	0.746	0.039	<u>ICMT</u>
	0.756	0.050	<u>EFNA2</u>
	0.765	0.061	<u>EP300</u>
	0.750	0.047	<u>RCHY1</u>
	0.771	0.069	<u>EYA3</u>
	0.765	0.063	<u>VSNL1</u>
	0.744	0.043	<u>SLC22A18AS</u>
	0.751	0.050	<u>XCR1</u>
	0.748	0.048	<u>PDK3</u>
	0.759	0.060	<u>HRH3</u>
	0.768	0.071	<u>CLEC5A</u>
	0.752	0.055	<u>ARMC9</u>
	0.758	0.061	<u>H2AFX</u>
	0.743	0.047	<u>MPPED2</u>
	0.763	0.067	<u>TFAP2C</u>
	0.751	0.055	<u>ATP12A</u>
	0.744	0.052	<u>ZNF480</u>
	0.732	0.041	<u>HIST1H2BK</u>
	0.744	0.054	<u>MEOX2</u>
	0.748	0.058	<u>ZNF695</u>
	0.735	0.045	<u>RHOA</u>
	0.740	0.050	<u>TRIM33</u>
	0.749	0.060	<u>PRPF31</u>
	0.745	0.056	<u>TAF4</u>
	0.753	0.065	<u>PER2</u>

	0.747	0.059	<u>PHC3</u>
	0.745	0.058	<u>SAP30</u>
	0.743	0.057	<u>PPEF2</u>
	0.746	0.060	<u>PRX</u>
	0.748	0.064	<u>HCRTR1</u>
	0.748	0.064	<u>ALDH3A2</u>
	0.745	0.062	<u>GFRA2</u>
	0.748	0.066	DKFZP686O1327
	0.754	0.072	<u>RP2</u>
	0.746	0.065	<u>UBAP2L</u>
	0.744	0.064	<u>CEP152</u>
	0.742	0.062	CC2D1A
	0.735	0.055	<u>FUT3</u>
	0.737	0.058	<u>DENND1C</u>
	0.734	0.055	POLR2J4
	0.732	0.054	<u>CCNE2</u>
	0.760	0.082	<u>CCBP2</u>
	0.741	0.065	<u>HSD3B1</u>
	0.735	0.058	<u>PBX2</u>
	0.729	0.053	<u>KLHL11</u>
	0.753	0.077	<u>TAPT1</u>
	0.752	0.077	<u>PCDHGC3</u>
	0.730	0.055	<u>TRANK1</u>
	0.752	0.079	<u>TMEM206</u>
	0.738	0.065	<u>HTR1D</u>
	0.743	0.072	<u>HCN2</u>
	0.734	0.063	<u>C15ORF39</u>
	0.732	0.061	FOXN1
	0.728	0.057	<u>WDR59</u>
	0.749	0.079	<u>MICAL2</u>
	0.716	0.045	<u>PLP2</u>
	0.742	0.072	<u>TSNAXIP1</u>
	0.738	0.067	<u>MAF</u>
	0.727	0.058	<u>IREB2</u>
	0.727	0.058	<u>SLC15A2</u>
	0.714	0.046	<u>LRP4</u>
	0.718	0.050	<u>PRKX</u>
	0.712	0.045	<u>SIDT1</u>
	0.730	0.063	<u>TAOK2</u>
	0.740	0.075	<u>GABRA2</u>
	0.733	0.068	<u>HS3ST3B1</u>
	0.725	0.060	<u>HLA-DRB6</u>
	0.723	0.059	<u>E2F1</u>
	0.736	0.072	<u>POU3F4</u>
	0.732	0.069	<u>FGF23</u>
	0.734	0.071	<u>ALK</u>
	0.736	0.075	<u>LARP4B</u>

	0.730	0.070	<u>PTPRC</u>
	0.685	0.025	<u>UGDH</u>
	0.731	0.073	<u>SDHD</u>
	0.719	0.061	<u>SENP6</u>
	0.738	0.080	<u>EXTL3</u>
	0.712	0.055	<u>ETV1</u>
	0.732	0.076	<u>FSHR</u>
	0.734	0.078	<u>SPN</u>
	0.726	0.074	<u>AQP4</u>
	0.727	0.075	<u>RBMS2</u>
	0.721	0.071	<u>SMCP</u>
	0.713	0.066	<u>FUT2</u>
	0.734	0.088	<u>NUP205</u>
	0.709	0.063	<u>MYB</u>
	0.711	0.067	<u>WWTR1</u>
	0.712	0.069	<u>ADAMTSL4</u>
	0.709	0.067	<u>DDR1</u>
	0.685	0.045	<u>PLA2G15</u>
	0.699	0.061	<u>PDS5A</u>
	0.714	0.077	<u>KHK</u>
	0.722	0.085	<u>LEF1</u>
	0.658	0.021	<u>DERL2</u>
	0.661	0.025	<u>TCFL5</u>
	0.707	0.071	<u>TOM1</u>
	0.658	0.022	<u>HOMER2</u>
	0.714	0.078	LOC51145
	0.723	0.088	<u>MCF2</u>
	0.722	0.088	<u>HRK</u>
	0.704	0.071	<u>NXT2</u>
	0.717	0.085	<u>HBS1L</u>
	0.704	0.072	<u>OLAH</u>
	0.703	0.073	<u>NPY6R</u>
	0.722	0.091	<u>PGCP</u>
	0.712	0.082	<u>GRIN2C</u>
	0.708	0.080	<u>NOTCH3</u>
	0.705	0.079	<u>PDK4</u>
	0.680	0.055	<u>MBOAT2</u>
	0.706	0.081	<u>HIPK3</u>
	0.705	0.080	<u>ARHGAP6</u>
	0.700	0.076	<u>STRN</u>
	0.709	0.085	<u>HOXD1</u>
	0.704	0.081	<u>FOXD3</u>
	0.700	0.077	TSSK1B
	0.707	0.084	ZNF3
	0.707	0.085	ZNF280B
	0.698	0.078	<u>HLF</u>
	0.696	0.076	<u>BCL2</u>

	0.694	0.076	<u>CYLC2</u>
	0.697	0.079	<u>ATXN3L</u>
	0.692	0.077	<u>DHRS7</u>
	0.687	0.073	<u>FOXE1</u>
	0.703	0.090	<u>RASAL2</u>
	0.697	0.086	<u>CNGB1</u>
	0.676	0.066	<u>SMEK1</u>
	0.686	0.080	<u>TOP3A</u>
	0.716	0.110	<u>GRIA1</u>
	0.680	0.079	<u>EP400</u>
	0.694	0.093	<u>EHD2</u>
	0.669	0.069	<u>SHC1</u>
	0.649	0.048	<u>GABARAPL1</u>
	0.692	0.092	<u>FKBP1A</u>
	0.690	0.092	<u>GSPT1</u>
	0.645	0.052	<u>S100A4</u>
	0.686	0.093	<u>TIMM8A</u>
	0.693	0.100	<u>RPL10</u>
	0.644	0.051	<u>CISD1</u>
	0.697	0.104	<u>LRRC37BP1</u>
	0.694	0.102	<u>TLR6</u>
	0.673	0.082	<u>SIGLEC1</u>
	0.677	0.087	<u>CCNT2</u>
	0.690	0.102	<u>PCIF1</u>
	0.669	0.081	<u>POM121L9P</u>
	0.633	0.046	<u>TF</u>
	0.641	0.055	<u>CDH3</u>
	0.673	0.087	<u>AKAP9</u>
	0.678	0.094	<u>LILRA5</u>
	0.678	0.094	<u>SP2</u>
	0.673	0.092	<u>ERC2</u>
	0.687	0.107	<u>ELAC2</u>
	0.668	0.090	<u>AMACR</u>
	0.644	0.066	<u>IKBKAP</u>
	0.676	0.099	<u>RYR2</u>
	0.683	0.106	<u>SMAD4</u>
	0.664	0.089	<u>LRRC23</u>
	0.660	0.086	<u>CUL4B</u>
	0.667	0.095	<u>KIF1A</u>
	0.651	0.079	<u>DCUN1D4</u>
	0.665	0.093	<u>TACSTD2</u>
	0.664	0.094	<u>TUB</u>
	0.670	0.102	<u>HPCAL4</u>
	0.654	0.088	<u>NCAPH2</u>
	0.654	0.088	<u>NUDT7</u>
	0.660	0.095	<u>COL8A1</u>
	0.623	0.059	<u>PSMF1</u>

	0.664	0.099	<u>PDE11A</u>
	0.656	0.092	<u>CFTR</u>
	0.658	0.096	<u>ELOVL5</u>
	0.617	0.055	<u>CCNA1</u>
	0.670	0.109	<u>PCSK2</u>
	0.650	0.089	TEX28
	0.653	0.092	<u>ATF7IP</u>
	0.668	0.109	<u>TRPC6</u>
	0.660	0.101	<u>ULK4</u>
	0.671	0.113	<u>FLT1</u>
	0.645	0.088	<u>CDC42EP4</u>
	0.665	0.108	<u>RFPL3-AS1</u>
	0.651	0.096	<u>KCNH6</u>
	0.651	0.097	<u>SYT1</u>
	0.656	0.102	<u>CD36</u>
	0.662	0.109	<u>GUCA1B</u>
	0.655	0.103	LOC220077
	0.648	0.096	<u>RPL13</u>
	0.641	0.089	<u>DPF3</u>
	0.604	0.053	<u>NOLC1</u>
	0.656	0.106	MUC8
	0.651	0.103	<u>FOXA2</u>
	0.649	0.101	ZNF442
	0.614	0.066	<u>GAA</u>
	0.647	0.100	<u>C16ORF71</u>
	0.632	0.088	FLJ10038
	0.651	0.108	<u>ZBTB7A</u>
	0.647	0.108	<u>ABI2</u>
	0.630	0.092	<u>LCE2B</u>
	0.659	0.120	<u>AHNAK</u>
	0.646	0.109	<u>BCL2L11</u>
	0.651	0.115	<u>SLCO1A2</u>
	0.634	0.101	<u>PDLIM4</u>
	0.630	0.097	<u>SERPINB7</u>
	0.628	0.095	<u>EIF5B</u>
	0.651	0.118	<u>C6ORF10</u>
	0.582	0.049	<u>LOXL1</u>
	0.612	0.081	<u>COG4</u>
	0.643	0.113	GPR52
	0.620	0.092	<u>CLNS1A</u>
	0.624	0.097	<u>PLLP</u>
	0.625	0.099	<u>RUNDC3A</u>
	0.636	0.111	<u>IDS</u>
	0.632	0.107	EPAG
	0.628	0.105	CTIF
	0.636	0.114	<u>TRO</u>
	0.639	0.118	<u>PDE4C</u>

	0.627	0.107	<u>SRGAP3</u>
	0.639	0.119	<u>ACSBG1</u>
	0.640	0.121	<u>FPR2</u>
	0.621	0.103	<u>GALC</u>
	0.631	0.113	<u>SOCS1</u>
	0.636	0.122	<u>RS1</u>
	0.620	0.107	<u>PPP4R4</u>
	0.628	0.116	<u>P2RX1</u>
	0.627	0.115	<u>ARHGEF4</u>
	0.634	0.123	<u>RPS6KA6</u>
	0.576	0.069	<u>KLHL9</u>
	0.618	0.111	<u>PAPOLA</u>
	0.620	0.114	<u>MYL4</u>
	0.625	0.121	<u>NUP88</u>
	0.607	0.104	<u>NCOA3</u>
	0.604	0.102	<u>SLC26A2</u>
	0.608	0.107	<u>FOXG1</u>
	0.616	0.116	<u>PRKAR2A</u>
	0.565	0.065	<u>NME1</u>
	0.610	0.112	<u>NCLN</u>
	0.611	0.114	<u>XIAP</u>
	0.608	0.111	<u>FPR1</u>
	0.620	0.125	<u>ACTR2</u>
	0.611	0.116	<u>VPS13C</u>
	0.606	0.112	<u>CDK17</u>
	0.589	0.100	<u>MPZ</u>
	0.545	0.058	<u>WDR7</u>
	0.614	0.128	<u>TAS2R4</u>
	0.608	0.122	<u>AURKC</u>
	0.581	0.099	<u>ATP6V1D</u>
	0.600	0.119	<u>GPR37</u>
	0.601	0.121	<u>PQLC3</u>
	0.610	0.130	<u>P2RY1</u>
	0.604	0.125	<u>ANK2</u>
	0.588	0.109	<u>CD163</u>
	0.607	0.128	<u>TRIM3</u>
	0.600	0.125	<u>WISP1</u>
	0.604	0.129	<u>KIAA1751</u>
	0.595	0.123	<u>OR52A1</u>
	0.583	0.111	<u>RSF1</u>
	0.585	0.114	<u>EPS15L1</u>
	0.591	0.123	<u>CCL25</u>
	0.586	0.120	<u>KIDINS220</u>
	0.582	0.117	<u>MEG3</u>
	0.587	0.125	<u>CTNS</u>
	0.584	0.122	<u>BRF1</u>
	0.585	0.125	<u>JAK3</u>

	0.573	0.120	<u>TCP10L</u>
	0.581	0.128	<u>TDRKH</u>
	0.576	0.127	<u>IGHA1</u>
	0.564	0.116	<u>RNGTT</u>
	0.580	0.132	<u>VENTXP1</u>
	0.579	0.131	<u>GABRB2</u>
	0.582	0.135	<u>SCN11A</u>
	0.567	0.120	<u>TRGV5</u>
	0.583	0.139	<u>CNTNAP2</u>
	0.578	0.134	<u>NIPBL</u>
	0.570	0.128	<u>NRXN3</u>
	0.568	0.128	<u>PICALM</u>
	0.581	0.141	<u>LIMK1</u>
	0.534	0.097	<u>NFATC3</u>
	0.563	0.126	<u>CHEK1</u>
	0.548	0.111	<u>KIAA1324</u>
	0.568	0.132	<u>SOCS3</u>
	0.576	0.141	<u>PIN4</u>
	0.575	0.140	<u>GAB1</u>
	0.562	0.129	<u>PPARA</u>
	0.566	0.133	<u>LYST</u>
	0.570	0.138	<u>REPIN1</u>
	0.568	0.140	<u>HUS1</u>
	0.562	0.135	<u>DCHS2</u>
	0.565	0.138	<u>VIPR2</u>
	0.565	0.139	<u>GRIN1</u>
	0.565	0.140	<u>MED25</u>
	0.544	0.120	<u>GSTM2</u>
	0.544	0.122	<u>SAFB</u>
	0.562	0.143	<u>DRD3</u>
	0.542	0.128	<u>PIP5K1B</u>
	0.559	0.145	<u>ACSL6</u>
	0.561	0.147	<u>SYDE1</u>
	0.568	0.155	<u>FKBP15</u>
	0.565	0.152	<u>EZR</u>
	0.550	0.137	<u>GJB3</u>
	0.565	0.152	<u>C11ORF9</u>
	0.554	0.142	<u>KANK1</u>
	0.551	0.139	<u>DTX3</u>
	0.548	0.137	<u>MVK</u>
	0.548	0.138	<u>ASB4</u>
	0.540	0.133	<u>ZMYND8</u>
	0.544	0.139	<u>CD8B</u>
	0.549	0.145	<u>KLRD1</u>
	0.543	0.139	<u>SIKE1</u>
	0.542	0.139	<u>PCSK6</u>
	0.535	0.133	<u>ANKRD12</u>

	0.548	0.148	<u>ESR2</u>
	0.533	0.141	<u>MUSK</u>
	0.535	0.143	<u>ZBTB44</u>
	0.536	0.146	<u>SMARCA1</u>
	0.535	0.148	<u>NEU3</u>
	0.531	0.145	<u>COBLL1</u>
	0.526	0.140	<u>CASR</u>
	0.525	0.142	<u>SYNJ2</u>
	0.530	0.148	<u>ERCC4</u>
	0.526	0.144	<u>ZIM2</u>
	0.528	0.147	<u>P2RX2</u>
	0.524	0.142	<u>KCNMA1</u>
	0.529	0.148	<u>CEACAM3</u>
	0.526	0.145	<u>GRM1</u>
	0.517	0.137	<u>HEBP2</u>
	0.527	0.148	<u>RUNX1T1</u>
	0.516	0.139	<u>CYP2D6</u>
	0.522	0.146	<u>IOCK</u>
	0.507	0.131	<u>MBNL1</u>
	0.511	0.135	<u>EDDM3A</u>
	0.535	0.160	<u>NRXN1</u>
	0.533	0.157	<u>HSPA12A</u>
	0.531	0.157	<u>DCTN1</u>
	0.519	0.146	<u>AKAP6</u>
	0.512	0.141	<u>BRP44</u>
	0.519	0.152	<u>CHRNE</u>
	0.526	0.160	<u>HNMT</u>
	0.549	0.182	<u>NPTN</u>
	0.519	0.152	<u>GLS</u>
	0.523	0.158	<u>SNRK</u>
	0.514	0.151	<u>CD22</u>
	0.508	0.145	<u>RBMXL2</u>
	0.514	0.155	<u>ADCY9</u>
	0.523	0.165	<u>RALGPS1</u>
	0.508	0.153	<u>CAMSAP1</u>
	0.507	0.152	<u>ELK1</u>
	0.514	0.160	<u>SLC25A30</u>
	0.509	0.159	<u>GRK4</u>
	0.506	0.156	<u>ST6GAL1</u>
	0.505	0.158	<u>MAU2</u>
	0.522	0.176	<u>OBSL1</u>
	0.514	0.170	<u>PPFIBP1</u>
	0.509	0.169	<u>KCND3</u>
	0.509	0.170	<u>NCR1</u>
	0.504	0.171	<u>PIGR</u>
	0.508	0.179	<u>MLLT4</u>

Combination prediction result

<u>Name</u>	<u>Overlap count</u>	<u>Up</u>	<u>Down</u>	<u>Result</u>
<u>ITM2B</u>	4	2	2	
<u>KIAA0753</u>	4	2	2	
<u>PDS5B</u>	4	4	0	
<u>RIT1</u>	4	2	2	
<u>SEC24D</u>	4	3	1	
<u>TXNL4B</u>	4	2	2	
<u>ACADL</u>	3	2	1	
<u>AFF4</u>	3	2	1	
<u>AIMP2</u>	3	0	3	
<u>ANKRA2</u>	3	2	1	
<u>ANXA1</u>	3	1	2	
<u>ARFGEF2</u>	3	3	0	
<u>ATP6V0E1</u>	3	1	2	
<u>BANP</u>	3	2	1	
<u>BRD2</u>	3	1	2	
<u>C9ORF40</u>	3	0	3	
<u>CBR3</u>	3	3	0	
<u>CCT6A</u>	3	1	2	
<u>CDCP1</u>	3	2	1	
<u>CDKN2C</u>	3	2	1	
<u>CEACAM6</u>	3	1	2	
<u>CHST15</u>	3	1	2	
<u>COQ9</u>	3	2	1	
<u>COX7A1</u>	3	1	2	
<u>CTSB</u>	3	2	1	
<u>DCAF17</u>	3	2	1	
<u>DHX40</u>	3	1	2	
<u>DIAPH2</u>	3	1	2	
<u>EEF1B2</u>	3	1	2	
<u>EHHADH</u>	3	1	2	
<u>FAM179B</u>	3	2	1	
<u>FAM188A</u>	3	2	1	
<u>FKBP5</u>	3	3	0	
<u>FUBP1</u>	3	2	1	
<u>GABARAPL1</u>	3	2	1	
<u>GFAP</u>	3	1	2	
<u>GLOD4</u>	3	1	2	
<u>HERC1</u>	3	1	2	
<u>HIBCH</u>	3	1	2	
<u>IKBKAP</u>	3	1	2	
<u>IL6ST</u>	3	2	1	
<u>KEAP1</u>	3	1	2	
<u>LIAS</u>	3	1	2	
<u>LINC00342</u>	3	2	1	

<u>LRRC8E</u>	3	2	1	
<u>MAST4</u>	3	0	3	
<u>MDM2</u>	3	1	2	
<u>MTSS1</u>	3	2	1	
<u>NEBL</u>	3	2	1	
<u>NIPBL</u>	3	3	0	
<u>NUBP1</u>	3	1	2	
<u>P2RY1</u>	3	2	1	
<u>PAPOLA</u>	3	2	1	
<u>PARP4</u>	3	0	3	
<u>PDK4</u>	3	2	1	
<u>PER3</u>	3	1	2	
<u>PGM3</u>	3	1	2	
<u>PLK1</u>	3	1	2	
<u>PLP2</u>	3	2	1	
<u>PPP1R12A</u>	3	2	1	
<u>PREP</u>	3	1	2	
<u>PTPN12</u>	3	2	1	
<u>RAB14</u>	3	2	1	
<u>RANGAP1</u>	3	1	2	
<u>RETSAT</u>	3	1	2	
<u>RNMT</u>	3	1	2	
<u>RREB1</u>	3	2	1	
<u>SH3D21</u>	3	1	2	
<u>SLC25A37</u>	3	1	2	
<u>SLC4A7</u>	3	3	0	
<u>SMARCE1</u>	3	1	2	
<u>SPG11</u>	3	2	1	
<u>STK39</u>	3	1	2	
<u>STRADA</u>	3	2	1	
<u>TMEM5</u>	3	2	1	
<u>TRIM2</u>	3	2	1	
<u>UBE2C</u>	3	1	2	
<u>UBE2D3</u>	3	2	1	
<u>UBE2M</u>	3	1	2	
<u>WDR44</u>	3	1	2	
<u>WIZ</u>	3	2	1	
<u>ZFAND1</u>	3	2	1	
<u>ZNF302</u>	3	2	1	
<u>ABHD10</u>	2	0	2	
<u>ACRV1</u>	2	2	0	
<u>ACSL3</u>	2	0	2	
<u>ADCY2</u>	2	2	0	
<u>ADH5</u>	2	0	2	
<u>ADO</u>	2	0	2	
<u>AHCYL2</u>	2	2	0	
<u>AK2</u>	2	0	2	
<u>AKAP9</u>	2	2	0	

<u>ALOX15B</u>	2	2	0	
<u>ALOX5</u>	2	2	0	
<u>AMACR</u>	2	2	0	
<u>ANKRD12</u>	2	2	0	
<u>ANPEP</u>	2	2	0	
<u>AP1S2</u>	2	2	0	
<u>APC</u>	2	2	0	
<u>APPBP2</u>	2	2	0	
<u>ARF6</u>	2	2	0	
<u>ARFIP2</u>	2	0	2	
<u>ARID1A</u>	2	2	0	
<u>ASS1</u>	2	2	0	
<u>ATF6</u>	2	2	0	
<u>ATG5</u>	2	2	0	
<u>ATIC</u>	2	0	2	
<u>ATP6V1C1</u>	2	2	0	
<u>ATP6V1D</u>	2	2	0	
<u>ATP9B</u>	2	2	0	
<u>ATXN7</u>	2	2	0	
<u>BAIAP2</u>	2	2	0	
<u>BNIP3</u>	2	0	2	
<u>BPTF</u>	2	2	0	
<u>BST2</u>	2	0	2	
<u>C6ORF47</u>	2	0	2	
<u>C8ORF60</u>	2	2	0	
<u>CACYBP</u>	2	0	2	
<u>CADPS</u>	2	2	0	
<u>CALM1</u>	2	2	0	
<u>CAMKK2</u>	2	2	0	
<u>CAPRIN1</u>	2	0	2	
<u>CARS</u>	2	0	2	
<u>CASP10</u>	2	2	0	
<u>CC2D1A</u>	2	2	0	
<u>CCNL1</u>	2	2	0	
<u>CD2AP</u>	2	2	0	
<u>CD300C</u>	2	2	0	
<u>CD47</u>	2	2	0	
<u>CD68</u>	2	2	0	
<u>CDC42EP4</u>	2	2	0	
<u>CDH11</u>	2	2	0	
<u>CDK12</u>	2	2	0	
<u>CDK4</u>	2	0	2	
<u>CDR2L</u>	2	0	2	
<u>CEBPD</u>	2	2	0	
<u>CEP152</u>	2	2	0	
<u>CERS4</u>	2	0	2	
<u>CHEK1</u>	2	2	0	
<u>CHRNE</u>	2	2	0	

<u>CIITA</u>	2	2	0	
<u>CLDN15</u>	2	2	0	
<u>CLEC5A</u>	2	2	0	
<u>CNPPD1</u>	2	0	2	
<u>COL4A6</u>	2	2	0	
<u>CPSF7</u>	2	2	0	
<u>CPT2</u>	2	0	2	
<u>CREB1</u>	2	2	0	
<u>CREB3</u>	2	0	2	
<u>CREB3L1</u>	2	2	0	
<u>CRKL</u>	2	2	0	
<u>CSNK2A2</u>	2	2	0	
<u>CTSL1</u>	2	0	2	
<u>CTTN</u>	2	2	0	
<u>CYP1A1</u>	2	0	2	
<u>CYP2E1</u>	2	2	0	
<u>CYTIP</u>	2	2	0	
<u>DBN1</u>	2	0	2	
<u>DDIT4</u>	2	2	0	
<u>DDX17</u>	2	2	0	
<u>DDX3X</u>	2	2	0	
<u>DENND2D</u>	2	2	0	
<u>DKK3</u>	2	2	0	
<u>DLG5</u>	2	2	0	
<u>DNAJB14</u>	2	2	0	
<u>DNAJB2</u>	2	0	2	
<u>DNAJC9</u>	2	0	2	
<u>DNASE2</u>	2	0	2	
<u>DOCK9</u>	2	2	0	
<u>DSG2</u>	2	0	2	
<u>DST</u>	2	2	0	
<u>EEF1G</u>	2	0	2	
<u>EFCAB1</u>	2	2	0	
<u>EFNA3</u>	2	0	2	
<u>EHD3</u>	2	0	2	
<u>EIF3G</u>	2	0	2	
<u>EIF5A</u>	2	2	0	
<u>ELF2</u>	2	2	0	
<u>ELK1</u>	2	2	0	
<u>ELK4</u>	2	2	0	
<u>EMR2</u>	2	2	0	
<u>EPHA4</u>	2	2	0	
<u>ERAP1</u>	2	2	0	
<u>ERCC2</u>	2	0	2	
<u>ERGIC2</u>	2	0	2	
<u>ETV1</u>	2	2	0	
<u>EXOC7</u>	2	2	0	
<u>EZR</u>	2	2	0	

<u>FAM105A</u>	2	2	0	
<u>FAM134A</u>	2	0	2	
<u>FAM198B</u>	2	2	0	
<u>FARSA</u>	2	0	2	
<u>FBXL5</u>	2	2	0	
<u>FBXO21</u>	2	2	0	
<u>FBXO7</u>	2	0	2	
<u>FBXW2</u>	2	0	2	
<u>FKBP4</u>	2	2	0	
<u>FOXA2</u>	2	2	0	
<u>FPR2</u>	2	2	0	
<u>FTL</u>	2	0	2	
<u>FZD7</u>	2	0	2	
<u>GALNT10</u>	2	0	2	
<u>GCLC</u>	2	2	0	
<u>GFOD1</u>	2	2	0	
<u>GNMT</u>	2	2	0	
<u>GOLGA2</u>	2	0	2	
<u>GOLGA3</u>	2	0	2	
<u>GRB7</u>	2	2	0	
<u>GRIN1</u>	2	2	0	
<u>GSK3B</u>	2	2	0	
<u>GSS</u>	2	0	2	
<u>H2BFS</u>	2	0	2	
<u>HECTD3</u>	2	0	2	
<u>HERC2</u>	2	2	0	
<u>HIPK1</u>	2	2	0	
<u>HIST1H1D</u>	2	2	0	
<u>HIST1H1T</u>	2	2	0	
<u>HK1</u>	2	2	0	
<u>HNRNPD</u>	2	2	0	
<u>HPCAL4</u>	2	2	0	
<u>HSD17B10</u>	2	0	2	
<u>HUS1</u>	2	2	0	
<u>ID1</u>	2	2	0	
<u>IER3</u>	2	0	2	
<u>IFIT1</u>	2	2	0	
<u>IGF2R</u>	2	2	0	
<u>IL11</u>	2	2	0	
<u>IL12B</u>	2	2	0	
<u>IL13RA1</u>	2	2	0	
<u>IL1R2</u>	2	2	0	
<u>INPP1</u>	2	2	0	
<u>IQCK</u>	2	2	0	
<u>ITGA5</u>	2	0	2	
<u>ITGB1</u>	2	2	0	
<u>ITGB4</u>	2	2	0	
<u>ITPK1</u>	2	2	0	

<u>KARS</u>	2	0	2	
<u>KAZALD1</u>	2	0	2	
<u>KCTD9</u>	2	2	0	
<u>KDM4C</u>	2	2	0	
<u>KIAA1324</u>	2	2	0	
<u>KLK5</u>	2	2	0	
<u>KLK7</u>	2	2	0	
<u>KRR1</u>	2	0	2	
<u>KRT6A</u>	2	2	0	
<u>LAP3</u>	2	2	0	
<u>LARP4B</u>	2	2	0	
<u>LG11</u>	2	2	0	
<u>LIN7C</u>	2	2	0	
<u>LINS</u>	2	2	0	
<u>MAN1A2</u>	2	2	0	
<u>MAP3K5</u>	2	0	2	
<u>MASP2</u>	2	2	0	
<u>MAT2A</u>	2	0	2	
<u>MAU2</u>	2	2	0	
<u>MCL1</u>	2	0	2	
<u>MCMBP</u>	2	0	2	
<u>MEF2A</u>	2	2	0	
<u>MEOX1</u>	2	0	2	
<u>METTL21D</u>	2	0	2	
<u>MGAT4B</u>	2	0	2	
<u>MIOS</u>	2	2	0	
<u>MORC2</u>	2	0	2	
<u>MRPL34</u>	2	0	2	
<u>MRPL52</u>	2	0	2	
<u>MRPS27</u>	2	0	2	
<u>MSR1</u>	2	2	0	
<u>MUC8</u>	2	2	0	
<u>MUM1</u>	2	0	2	
<u>MVP</u>	2	2	0	
<u>MYB</u>	2	2	0	
<u>MYBL2</u>	2	2	0	
<u>MYLK3</u>	2	0	2	
<u>MYO1B</u>	2	2	0	
<u>NACA</u>	2	0	2	
<u>NDUFB2</u>	2	2	0	
<u>NEK4</u>	2	0	2	
<u>NEMF</u>	2	0	2	
<u>NF1</u>	2	2	0	
<u>NFE2L2</u>	2	2	0	
<u>NFYA</u>	2	2	0	
<u>NKTR</u>	2	0	2	
<u>NLRP3</u>	2	2	0	
<u>NOS2</u>	2	0	2	

<u>NPPA</u>	2	2	0	
<u>NPPB</u>	2	2	0	
<u>NR1H2</u>	2	2	0	
<u>NR4A1</u>	2	2	0	
<u>NRXN3</u>	2	2	0	
<u>OGT</u>	2	2	0	
<u>OPA3</u>	2	0	2	
<u>OR51E2</u>	2	2	0	
<u>P2RY2</u>	2	0	2	
<u>PANX1</u>	2	0	2	
<u>PARP2</u>	2	0	2	
<u>PCGF3</u>	2	2	0	
<u>PDE5A</u>	2	2	0	
<u>PDGFB</u>	2	2	0	
<u>PDHX</u>	2	2	0	
<u>PEA15</u>	2	2	0	
<u>PEX14</u>	2	0	2	
<u>PFKFB2</u>	2	2	0	
<u>PFKM</u>	2	0	2	
<u>PHB</u>	2	0	2	
<u>PHF10</u>	2	0	2	
<u>PHGDH</u>	2	0	2	
<u>PHIP</u>	2	2	0	
<u>PHLPP1</u>	2	2	0	
<u>PICALM</u>	2	2	0	
<u>PIEZO2</u>	2	0	2	
<u>PIN1</u>	2	0	2	
<u>PLAUR</u>	2	0	2	
<u>PLEKHA1</u>	2	0	2	
<u>PLEKHG3</u>	2	2	0	
<u>PLIN2</u>	2	2	0	
<u>PLLP</u>	2	2	0	
<u>PNP</u>	2	0	2	
<u>PPIE</u>	2	0	2	
<u>PPP1CA</u>	2	0	2	
<u>PRKAR2A</u>	2	2	0	
<u>PRKX</u>	2	2	0	
<u>PRMT5</u>	2	0	2	
<u>PRPF4B</u>	2	2	0	
<u>PRSS22</u>	2	2	0	
<u>PRSS23</u>	2	0	2	
<u>PSG9</u>	2	2	0	
<u>PSMA7</u>	2	0	2	
<u>PSMG1</u>	2	0	2	
<u>PSPH</u>	2	0	2	
<u>PTPN2</u>	2	0	2	
<u>PTPN21</u>	2	2	0	
<u>PYCR1</u>	2	0	2	

<u>PYGL</u>	2	2	0	
<u>OKI</u>	2	2	0	
<u>RAB28</u>	2	2	0	
<u>RAP1A</u>	2	2	0	
<u>RARG</u>	2	2	0	
<u>RB1</u>	2	2	0	
<u>RNASEH1</u>	2	0	2	
<u>RNF24</u>	2	2	0	
<u>RPL22</u>	2	0	2	
<u>RPL35</u>	2	0	2	
<u>RPL6</u>	2	0	2	
<u>RPS2</u>	2	0	2	
<u>RPS9</u>	2	0	2	
<u>RPUSD2</u>	2	0	2	
<u>RRNAD1</u>	2	0	2	
<u>RRP9</u>	2	0	2	
<u>RUFY1</u>	2	0	2	
<u>S100A8</u>	2	2	0	
<u>SAP30</u>	2	2	0	
<u>SCAMP1</u>	2	0	2	
<u>SCNN1G</u>	2	2	0	
<u>SDHAF1</u>	2	0	2	
<u>SECISBP2</u>	2	0	2	
<u>SELL</u>	2	0	2	
<u>SERPINB9</u>	2	2	0	
<u>SET</u>	2	0	2	
<u>SHC1</u>	2	2	0	
<u>SIGLEC7</u>	2	2	0	
<u>SKIV2L</u>	2	0	2	
<u>SLC25A13</u>	2	0	2	
<u>SLC25A46</u>	2	0	2	
<u>SLC39A4</u>	2	2	0	
<u>SLC45A2</u>	2	2	0	
<u>SMAP1</u>	2	2	0	
<u>SMC5</u>	2	2	0	
<u>SNAI2</u>	2	2	0	
<u>SNX16</u>	2	2	0	
<u>SNX6</u>	2	0	2	
<u>SOCS5</u>	2	2	0	
<u>SORBS1</u>	2	2	0	
<u>SORBS3</u>	2	0	2	
<u>SOS2</u>	2	2	0	
<u>SOX2</u>	2	2	0	
<u>SOX4</u>	2	0	2	
<u>SP110</u>	2	0	2	
<u>SPAST</u>	2	2	0	
<u>SPATA20</u>	2	2	0	
<u>SPR</u>	2	2	0	

<u>SPRED2</u>	2	2	0	
<u>SOLE</u>	2	2	0	
<u>SRCAP</u>	2	2	0	
<u>SRGAP3</u>	2	2	0	
<u>SSBP1</u>	2	2	0	
<u>STAMBP</u>	2	0	2	
<u>STAT3</u>	2	2	0	
<u>STAT5B</u>	2	0	2	
<u>STK25</u>	2	0	2	
<u>STK3</u>	2	2	0	
<u>STMN1</u>	2	0	2	
<u>STOML2</u>	2	2	0	
<u>STRN</u>	2	2	0	
<u>SUV39H2</u>	2	0	2	
<u>TAF4</u>	2	2	0	
<u>TARP</u>	2	2	0	
<u>TBKBP1</u>	2	0	2	
<u>TBL3</u>	2	0	2	
<u>TCEA2</u>	2	0	2	
<u>TCF12</u>	2	2	0	
<u>TCIRG1</u>	2	2	0	
<u>TCTA</u>	2	0	2	
<u>TFAP2C</u>	2	2	0	
<u>TFCP2L1</u>	2	0	2	
<u>TJP3</u>	2	0	2	
<u>TLE6</u>	2	0	2	
<u>TMEM144</u>	2	2	0	
<u>TMEM176A</u>	2	2	0	
<u>TMEM97</u>	2	0	2	
<u>TMPRSS2</u>	2	2	0	
<u>TNFAIP2</u>	2	2	0	
<u>TNPO1</u>	2	0	2	
<u>TNS3</u>	2	0	2	
<u>TOMM20</u>	2	0	2	
<u>TOMM22</u>	2	2	0	
<u>TOP2B</u>	2	2	0	
<u>TOPORS</u>	2	2	0	
<u>TP63</u>	2	2	0	
<u>TPP1</u>	2	2	0	
<u>TPSB2</u>	2	0	2	
<u>TRAM1</u>	2	0	2	
<u>TRPC6</u>	2	2	0	
<u>TSPAN3</u>	2	0	2	
<u>TXLNA</u>	2	0	2	
<u>UBE2D1</u>	2	2	0	
<u>UBE2G1</u>	2	2	0	
<u>UBE2S</u>	2	0	2	
<u>UBR2</u>	2	2	0	

<u>UBR7</u>	2	0	2	
<u>UFL1</u>	2	2	0	
<u>UGT2B17</u>	2	2	0	
<u>UHRF1BP1L</u>	2	2	0	
<u>UPF3A</u>	2	0	2	
<u>UQCR11</u>	2	0	2	
<u>USP7</u>	2	2	0	
<u>UTP6</u>	2	0	2	
<u>VPS13C</u>	2	2	0	
<u>WDTC1</u>	2	0	2	
<u>WISP2</u>	2	2	0	
<u>WWTR1</u>	2	2	0	
<u>XIAP</u>	2	2	0	
<u>XPO4</u>	2	2	0	
<u>XRCC1</u>	2	0	2	
ZBTB39	2	0	2	
<u>ZBTB7A</u>	2	2	0	
<u>ZDHHC4</u>	2	0	2	
<u>ZDHHC6</u>	2	0	2	
ZHX2	2	2	0	
ZNF204P	2	2	0	
ZNF442	2	2	0	
ZNF536	2	2	0	

Complex 5

mRNA based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.846	0.020	<u>TRAF5</u>	0.881	0.028	<u>AURKA</u>
0.772	0.061	<u>ADORA2B</u>	0.772	0.061	<u>PFKFB2</u>
0.772	0.061	<u>CDCA4</u>	0.772	0.061	<u>SH3BGRL</u>
0.772	0.061	<u>CENPJ</u>	0.772	0.061	<u>TRIM13</u>
0.772	0.061	<u>DNAJC9</u>	0.761	0.064	<u>DNAJB14</u>
0.772	0.061	<u>DONSON</u>	0.711	0.045	<u>GAS6</u>
0.772	0.061	<u>HAUS8</u>	0.724	0.075	<u>CACNG4</u>
0.772	0.061	<u>MCMBP</u>	0.724	0.075	<u>CHRNE</u>
0.772	0.061	<u>NUP155</u>	0.673	0.049	<u>WISP2</u>
0.772	0.061	<u>PARP2</u>	0.694	0.080	<u>SFRP1</u>
0.772	0.061	<u>RMI1</u>	0.686	0.109	<u>PBK</u>
0.772	0.061	<u>SCARA3</u>	0.682	0.105	<u>PPP1CB</u>
0.772	0.061	<u>SLC16A14</u>	0.599	0.024	<u>COX5B</u>
0.772	0.061	<u>SUV39H2</u>	0.634	0.090	<u>KCNH2</u>
0.747	0.047	<u>CAPRIN1</u>	0.634	0.090	<u>PLLP</u>
0.700	0.078	<u>GSS</u>	0.634	0.090	<u>SLC25A4</u>
0.688	0.073	<u>CXCL2</u>	0.634	0.090	<u>ZYX</u>
0.707	0.100	<u>C9ORF40</u>	0.608	0.067	<u>CHEK1</u>
0.586	0.034	<u>CCL5</u>	0.655	0.117	<u>SERPINB8</u>
0.613	0.062	<u>POC1A</u>	0.610	0.079	<u>TRIOBP</u>
0.634	0.090	<u>MAST4</u>	0.620	0.093	<u>SQLE</u>
0.634	0.090	<u>MSH5</u>	0.626	0.108	<u>SLC4A11</u>
0.634	0.090	<u>TREX1</u>	0.607	0.092	<u>KRT6A</u>
0.660	0.118	<u>TMSB15A</u>	0.566	0.061	<u>HMGCR</u>
0.686	0.159	<u>TBC1D9</u>	0.592	0.092	<u>CASP2</u>
0.615	0.097	<u>PPIH</u>	0.611	0.120	<u>UGT2B15</u>
0.609	0.106	<u>NPM1</u>	0.626	0.137	<u>TRIP13</u>
0.562	0.077	<u>DIO2</u>	0.543	0.060	<u>GAL</u>
0.620	0.135	<u>TPM1</u>	0.591	0.109	<u>CMBL</u>
0.504	0.023	<u>HOXA10</u>	0.578	0.104	<u>FADS1</u>
0.582	0.105	<u>NCOA1</u>	0.542	0.069	<u>GNMT</u>
0.600	0.125	<u>PLEC</u>	0.586	0.115	<u>CREB3L1</u>
0.592	0.119	<u>MAPK8</u>	0.586	0.115	<u>RNASEL</u>
0.510	0.041	<u>CAB39</u>	0.587	0.130	<u>COL22A1</u>
0.580	0.112	<u>GPLD1</u>	0.587	0.130	<u>KLK13</u>
0.560	0.096	<u>TANC1</u>	0.540	0.088	<u>HOXA11</u>
0.552	0.100	<u>MYNN</u>	0.527	0.075	<u>ABCA1</u>
0.557	0.112	<u>HPS5</u>	0.596	0.145	<u>GFRA1</u>
0.562	0.117	<u>CXCR7</u>	0.615	0.165	<u>UBE2C</u>
0.546	0.105	<u>ABCC5</u>	0.563	0.119	<u>MCM6</u>
0.552	0.113	<u>CTSL2</u>	0.563	0.119	<u>MCM7</u>
0.552	0.113	<u>GPR19</u>	0.561	0.121	<u>CYP2S1</u>
0.552	0.113	<u>LFNG</u>	0.552	0.113	<u>CNN2</u>

0.552	0.113	<u>MIR20B</u>	0.552	0.113	<u>DYSF</u>
0.552	0.113	<u>NUP54</u>	0.552	0.113	<u>FAM110C</u>
0.552	0.113	<u>PRR16</u>	0.552	0.113	<u>MYO5B</u>
0.552	0.113	<u>SP4</u>	0.552	0.113	<u>PPFIBP2</u>
0.572	0.142	<u>RPRM</u>	0.563	0.128	<u>CDC20</u>
0.559	0.134	<u>YPEL5</u>	0.603	0.172	<u>RACGAP1</u>
0.529	0.111	<u>NDE1</u>	0.534	0.120	<u>BRMS1</u>
0.505	0.099	<u>INCENP</u>	0.553	0.145	<u>MT1L</u>
0.550	0.157	<u>ERCC2</u>	0.535	0.142	<u>WT1</u>
0.513	0.123	<u>HSPA6</u>	0.520	0.150	<u>BLM</u>
0.512	0.147	<u>ZBTB10</u>	0.507	0.154	<u>ST3GAL1</u>
0.540	0.181	<u>RPS19</u>			
0.511	0.212	<u>HIFX</u>			

Protein based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.860	0.024	<u>CHEK1</u>	0.672	0.051	<u>NPPB</u>
0.695	0.018	<u>MDM2</u>	0.643	0.055	<u>AR</u>
0.550	0.021	<u>PRKCA</u>	0.534	0.049	<u>CYP3A4</u>
			0.506	0.041	<u>KRT18</u>
			0.516	0.063	<u>PRDX4</u>
			0.516	0.165	<u>CD83</u>

MCF7 based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.817	0.017	<u>FOXO1</u>	0.812	0.028	<u>CLDN9</u>
0.783	0.040	<u>LTBP3</u>	0.779	0.014	<u>CDKN1B</u>
0.702	0.039	<u>PTPN18</u>	0.784	0.021	<u>C11orf68</u>
0.742	0.092	<u>UBE2C</u>	0.783	0.025	<u>ZNF672</u>
0.666	0.033	<u>H2AFX</u>	0.769	0.014	<u>RANGAP1</u>
0.671	0.040	<u>SUCO</u>	0.793	0.038	<u>CLCF1</u>
0.663	0.032	<u>NFE2L3</u>	0.784	0.036	<u>MSRB2</u>
0.709	0.085	<u>C2CD2</u>	0.765	0.027	<u>ABCB6</u>
0.674	0.052	<u>PRRC1</u>	0.717	0.032	<u>PGM1</u>
0.647	0.027	<u>NREP</u>	0.693	0.057	<u>IFIT5</u>
0.663	0.046	<u>CCDC85B</u>	0.669	0.044	<u>GPRC5C</u>
0.663	0.046	<u>KIAA0101</u>	0.656	0.035	<u>SLC4A7</u>
0.645	0.029	<u>KCNQ1</u>	0.630	0.028	<u>DNAJB2</u>
0.636	0.023	<u>BBS4</u>	0.652	0.052	<u>PLA2G3</u>
0.649	0.042	<u>ARHGEF10</u>	0.666	0.077	<u>BTG2</u>
0.620	0.028	<u>MRPL34</u>	0.610	0.024	<u>TROAP</u>
0.633	0.042	<u>DPH2</u>	0.604	0.020	<u>RGS17</u>
0.604	0.021	<u>UBIAD1</u>	0.634	0.054	<u>BORA</u>
0.590	0.015	<u>CIAO1</u>	0.664	0.084	<u>CHD3</u>
0.613	0.039	<u>OGFR</u>	0.638	0.060	<u>FOXC1</u>

0.643	0.073	<u>SFSWAP</u>	0.610	0.033	<u>HEG1</u>
0.616	0.048	<u>STC2</u>	0.602	0.030	<u>GCLC</u>
0.609	0.042	<u>SIDT1</u>	0.633	0.063	<u>BNIP3L</u>
0.624	0.057	<u>CPTP</u>	0.589	0.020	<u>LSM14A</u>
0.610	0.046	<u>CHAF1A</u>	0.617	0.049	<u>RAB40B</u>
0.582	0.019	<u>CD3EAP</u>	0.577	0.013	<u>ANGEL2</u>
0.604	0.041	<u>RELA</u>	0.590	0.027	<u>DIP2C</u>
0.612	0.054	<u>SNAPC4</u>	0.606	0.043	<u>TRIM23</u>
0.591	0.037	<u>DIEXF</u>	0.613	0.053	<u>ZNF217</u>
0.625	0.074	<u>SBF1</u>	0.631	0.074	<u>WISP2</u>
0.613	0.070	<u>LPCAT4</u>	0.595	0.039	<u>ZNF211</u>
0.585	0.043	<u>PIK3R1</u>	0.586	0.034	<u>SCAND2P</u>
0.580	0.038	<u>CHAF1B</u>	0.566	0.015	<u>CDS2</u>
0.597	0.056	<u>RBPM5</u>	0.603	0.052	<u>DLG3</u>
0.574	0.035	<u>BCL2</u>	0.604	0.054	<u>CSRP2</u>
0.558	0.020	<u>SMCO4</u>	0.579	0.031	<u>TRMT11</u>
0.553	0.016	<u>GMCL1</u>	0.595	0.048	<u>CLCN3</u>
0.600	0.064	<u>GIT2</u>	0.584	0.039	<u>ZNF451</u>
0.622	0.086	<u>ADCY9</u>	0.593	0.050	<u>ZNF222</u>
0.561	0.025	<u>HGSNAT</u>	0.557	0.014	<u>SPR</u>
0.572	0.036	<u>VDR</u>	0.579	0.036	<u>NIPBL</u>
0.611	0.079	<u>FZD2</u>	0.594	0.055	<u>SCML1</u>
0.590	0.060	<u>ZC3HAV1</u>	0.581	0.043	<u>GABARAPL1</u>
0.567	0.038	<u>PDZK1</u>	0.575	0.040	<u>PIK3IP1</u>
0.570	0.041	<u>NOP2</u>	0.582	0.047	<u>ID3</u>
0.556	0.027	<u>MYD88</u>	0.546	0.014	<u>UBXN4</u>
0.585	0.057	<u>KIAA0368</u>	0.563	0.034	<u>ZFAND5</u>
0.564	0.037	<u>METTL1</u>	0.565	0.036	<u>ADM</u>
0.589	0.067	<u>SLC12A2</u>	0.578	0.050	<u>TXNIP</u>
0.564	0.043	<u>JADE2</u>	0.538	0.011	<u>HSPB8</u>
0.554	0.035	<u>APIAR</u>	0.559	0.034	<u>STYK1</u>
0.583	0.063	<u>FBXL14</u>	0.566	0.042	<u>PPM1E</u>
0.552	0.033	<u>THAP4</u>	0.560	0.036	<u>STK17A</u>
0.592	0.074	<u>SRSF6</u>	0.553	0.028	<u>PRNP</u>
0.567	0.049	<u>ZFYVE21</u>	0.572	0.049	<u>VAMP4</u>
0.547	0.029	<u>RIBC2</u>	0.559	0.037	<u>ZNF200</u>
0.574	0.056	<u>FLJ10038</u>	0.573	0.052	<u>SLC9A1</u>
0.580	0.063	<u>FKBPL</u>	0.561	0.041	<u>PTRF</u>
0.556	0.039	<u>ICAM3</u>	0.561	0.043	<u>SPAG9</u>
0.596	0.079	<u>PLK1</u>	0.579	0.062	<u>NFKBIB</u>
0.552	0.036	<u>RBM12</u>	0.557	0.044	<u>MINOS1P1</u>
0.570	0.054	<u>SMAD7</u>	0.570	0.057	<u>ZNF329</u>
0.555	0.040	<u>CISH</u>	0.546	0.034	<u>SORBS1</u>
0.561	0.047	<u>MMACHC</u>	0.560	0.048	<u>HIST2H2BE</u>
0.555	0.042	<u>MAST4</u>	0.577	0.066	<u>INTS6</u>
0.600	0.089	<u>EXOSC4</u>	0.554	0.043	<u>SIAH1</u>
0.577	0.065	<u>PANX1</u>	0.543	0.036	<u>DNAJB4</u>

0.547	0.037	<u>FJX1</u>	0.526	0.020	<u>MICB</u>
0.559	0.050	<u>FASTKD1</u>	0.560	0.055	<u>LYPD3</u>
0.560	0.052	<u>PSMD12</u>	0.533	0.029	<u>PHLPP1</u>
0.580	0.073	<u>C1orf174</u>	0.517	0.014	<u>BBX</u>
0.530	0.023	<u>C10orf2</u>	0.520	0.018	<u>PPP3CC</u>
0.544	0.038	<u>THG1L</u>	0.567	0.068	<u>PALLD</u>
0.531	0.024	<u>MREG</u>	0.535	0.038	<u>WDR47</u>
0.541	0.035	<u>URB2</u>	0.552	0.056	<u>N4BP2L2</u>
0.550	0.045	<u>FAM102A</u>	0.526	0.031	<u>UBE2H</u>
0.535	0.031	<u>RET</u>	0.581	0.088	<u>TMEM41B</u>
0.549	0.044	<u>ABR</u>	0.522	0.030	<u>OSBP</u>
0.575	0.071	<u>ESPL1</u>	0.516	0.026	<u>ATXN7</u>
0.551	0.048	<u>AKAP1</u>	0.547	0.058	<u>TFE3</u>
0.582	0.079	<u>HOMER3</u>	0.514	0.027	<u>RSRC2</u>
0.529	0.027	<u>ABLIM1</u>	0.573	0.087	<u>STRN</u>
0.580	0.079	<u>RERE</u>	0.513	0.028	<u>ADGRG6</u>
0.558	0.057	<u>HYAL2</u>	0.552	0.067	<u>DENND5A</u>
0.516	0.019	<u>PRKCD</u>	0.527	0.043	<u>EIF2AK3</u>
0.542	0.046	<u>TNS3</u>	0.522	0.039	<u>BAG2</u>
0.522	0.026	<u>DSCC1</u>	0.504	0.021	<u>BRAP</u>
0.530	0.035	<u>HSPBAP1</u>	0.537	0.054	<u>CLIP1</u>
0.539	0.044	<u>TSEN2</u>	0.521	0.038	<u>PPP3R1</u>
0.546	0.053	<u>FAM3C</u>	0.512	0.029	<u>PCYT1A</u>
0.548	0.056	<u>CDKN2C</u>	0.527	0.045	<u>RANBP9</u>
0.544	0.052	<u>KIAA0125</u>	0.506	0.025	<u>MED6</u>
0.584	0.093	<u>KIF18B</u>	0.520	0.039	<u>SLC5A3</u>
0.540	0.049	<u>INHBB</u>	0.508	0.028	<u>SLBP</u>
0.567	0.077	<u>IRX5</u>	0.502	0.022	<u>SLC39A14</u>
0.531	0.041	<u>PPP1R10</u>	0.538	0.057	<u>SCYL3</u>
0.549	0.059	<u>TCAF1</u>	0.510	0.030	<u>MTUS1</u>
0.542	0.053	<u>METTL21B</u>	0.506	0.027	<u>SQRL</u>
0.515	0.027	<u>PER2</u>	0.579	0.100	<u>DLX2</u>
0.532	0.047	<u>MYB</u>	0.521	0.043	<u>ZNF654</u>
0.522	0.037	<u>CDC42EP2</u>	0.509	0.032	<u>KDM6A</u>
0.564	0.079	<u>PANK2</u>	0.509	0.032	<u>FERMT2</u>
0.559	0.075	<u>MARCH8</u>	0.502	0.027	<u>MTMR11</u>
0.547	0.063	<u>CCDC101</u>	0.512	0.037	<u>COQ10B</u>
0.612	0.128	<u>PURA</u>	0.578	0.104	<u>ZFP36L1</u>
0.518	0.035	<u>MAP6D1</u>	0.520	0.045	<u>BRF2</u>
0.511	0.028	<u>SACS</u>	0.508	0.033	<u>KDM5B</u>
0.517	0.034	<u>LRIG1</u>	0.503	0.028	<u>FRYL</u>
0.522	0.039	<u>HEATR6</u>	0.518	0.045	<u>MAP3K14</u>
0.550	0.067	<u>PCBP1</u>	0.559	0.088	<u>KCTD5</u>
0.533	0.051	<u>UMPS</u>	0.516	0.044	<u>HIST2H2AA3</u>
0.527	0.045	<u>TST</u>	0.506	0.035	<u>GATA3</u>
0.523	0.042	<u>NAT1</u>	0.537	0.068	<u>FBXL5</u>
0.530	0.049	<u>ASUN</u>	0.509	0.041	<u>UBE2W</u>

0.520	0.040	<u>FAM134A</u>	0.547	0.079	<u>STX3</u>
0.541	0.061	<u>CTPS1</u>	0.534	0.066	<u>ALDOC</u>
0.509	0.031	<u>GDAP2</u>	0.549	0.082	<u>NKX3-1</u>
0.541	0.063	<u>ZNF22</u>	0.537	0.071	<u>ATG12</u>
0.512	0.034	<u>SCO2</u>	0.510	0.046	<u>LINC00963</u>
0.542	0.065	<u>PATZ1</u>	0.531	0.069	<u>NCLN</u>
0.556	0.079	<u>HMMR</u>	0.519	0.057	<u>NRP1</u>
0.505	0.029	<u>LCMT2</u>	0.524	0.064	<u>PROCR</u>
0.542	0.066	<u>SYNCRIP</u>	0.556	0.097	<u>KIAA0485</u>
0.508	0.034	<u>PWP2</u>	0.510	0.051	<u>FBXO5</u>
0.513	0.039	<u>MTSS1</u>	0.512	0.056	<u>PSG9</u>
0.571	0.097	<u>ZNF85</u>	0.513	0.058	<u>TUBA4A</u>
0.509	0.038	<u>ZNF232</u>	0.531	0.076	<u>PIK3R3</u>
0.540	0.069	<u>ACKR3</u>	0.539	0.095	<u>DMXL2</u>
0.511	0.040	<u>ASB13</u>	0.510	0.074	<u>FLRT3</u>
0.512	0.042	<u>MAGI1</u>	0.507	0.074	<u>GATA6</u>
0.525	0.055	<u>FAM178A</u>	0.602	0.175	<u>PTMS</u>
0.504	0.035	<u>KNOP1</u>	0.530	0.105	<u>FIP1L1</u>
0.508	0.040	<u>NINL</u>	0.522	0.100	<u>PIGA</u>
0.519	0.054	<u>FAM172A</u>	0.518	0.097	<u>SFPQ</u>
0.505	0.040	<u>DUSP7</u>	0.530	0.117	<u>PPCDC</u>
0.509	0.045	<u>METTL8</u>	0.530	0.117	<u>RRN3</u>
0.532	0.069	<u>MAGEF1</u>	0.505	0.093	<u>ELF3</u>
0.530	0.066	<u>NDUFAF4</u>	0.507	0.095	<u>FAM46C</u>
0.502	0.040	<u>SURF1</u>	0.516	0.105	<u>PNRC1</u>
0.508	0.046	<u>MBD4</u>	0.529	0.125	<u>KLF10</u>
0.502	0.040	<u>HK2</u>	0.527	0.135	<u>KIAA0232</u>
0.510	0.049	<u>APEX2</u>	0.514	0.136	<u>FOSL1</u>
0.510	0.049	<u>MGAT1</u>	0.511	0.192	<u>BIN1</u>
0.547	0.087	<u>SFN</u>			
0.545	0.086	<u>CDC42EP4</u>			
0.512	0.053	<u>ZMYM6</u>			
0.507	0.048	<u>DHRS1</u>			
0.560	0.102	<u>NR2C2</u>			
0.540	0.083	<u>TAF1D</u>			
0.503	0.049	<u>ZNF544</u>			
0.502	0.051	<u>APBB2</u>			
0.516	0.066	<u>FAM111A</u>			
0.513	0.063	<u>TACC1</u>			
0.511	0.061	<u>MRPS11</u>			
0.584	0.137	<u>RRP8</u>			
0.501	0.054	<u>STK10</u>			
0.507	0.062	<u>ARMCX1</u>			
0.513	0.069	<u>UNG</u>			
0.503	0.059	<u>SPDL1</u>			
0.503	0.059	<u>FGFR2</u>			
0.503	0.060	<u>DBP</u>			

0.517	0.074	<u>ZC3H14</u>
0.511	0.071	<u>ACVR1</u>
0.512	0.072	<u>PCIF1</u>
0.502	0.066	<u>CD44</u>
0.503	0.070	<u>TUBA4A</u>
0.505	0.075	<u>ATXN1</u>
0.538	0.111	<u>ARL4C</u>
0.502	0.075	<u>USP21</u>
0.502	0.077	<u>FUT4</u>
0.505	0.081	<u>SMAD3</u>
0.502	0.078	<u>ATP2A2</u>
0.502	0.079	<u>ARHGEF3</u>
0.525	0.102	<u>TNNT1</u>
0.524	0.103	<u>ADRA2C</u>
0.524	0.104	<u>SEC22A</u>
0.507	0.088	<u>ZC3H13</u>
0.524	0.106	<u>C3orf52</u>
0.507	0.097	<u>IMP3</u>
0.504	0.094	<u>CCNE2</u>
0.502	0.097	<u>GTF3C2</u>
0.518	0.115	<u>ALDH1A3</u>
0.512	0.115	<u>PUS3</u>
0.541	0.145	<u>GTSE1</u>
0.546	0.153	<u>FAM208B</u>
0.541	0.152	<u>RNF4</u>
0.507	0.118	<u>PCBP2</u>
0.506	0.126	<u>ZC3H7B</u>
0.527	0.157	<u>ANKRD12</u>
0.505	0.150	<u>C2orf42</u>

VCAP_6h based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.908	0.024	<u>BAG2</u>	0.924	0.005	<u>WBP2</u>
0.909	0.030	<u>POU3F2</u>	0.913	0.009	<u>ZFAND1</u>
0.888	0.022	<u>TRAIP</u>	0.897	0.004	<u>NGFRAP1</u>
0.858	0.006	<u>C6ORF47</u>	0.879	0.023	<u>CA2</u>
0.890	0.042	<u>ALMS1</u>	0.874	0.022	<u>EMG1</u>
0.872	0.031	RPL23AP53	0.850	0.011	<u>KIAA1324</u>
0.846	0.013	<u>TUT1</u>	0.794	0.014	<u>TMEM50A</u>
0.862	0.034	<u>MRPL24</u>	0.825	0.048	<u>GREM1</u>
0.845	0.022	<u>CAD</u>	0.806	0.030	<u>NCAPD3</u>
0.838	0.035	<u>KLHDC4</u>	0.768	0.014	TMEM93
0.843	0.047	<u>BRE</u>	0.761	0.050	<u>MMP3</u>
0.802	0.008	<u>LIPC</u>	0.724	0.042	<u>IRF7</u>
0.816	0.029	<u>BPIFA1</u>	0.727	0.067	<u>IPO13</u>

0.829	0.056	CEMP1	0.692	0.050	DHX15
0.813	0.047	CACNA1B	0.678	0.047	TUBB2A
0.789	0.033	DUX1	0.703	0.074	INTS7
0.806	0.052	PCP4	0.722	0.094	MMD
0.787	0.041	CXORF56	0.729	0.108	OSTM1
0.776	0.041	ZNF221	0.750	0.132	MCAT
0.765	0.031	CTSG	0.714	0.097	TTC33
0.733	0.007	C10ORF95	0.695	0.080	PRC1
0.775	0.051	REPS2	0.671	0.066	TXN2
0.737	0.016	KLK7	0.699	0.104	MRPL4
0.724	0.015	AGPAT3	0.670	0.081	GMEB2
0.741	0.035	PCBP4	0.629	0.044	TRIM36
0.773	0.069	PROX1	0.649	0.066	BFAR
0.774	0.072	SELL	0.652	0.073	INSIG1
0.765	0.065	IPCEF1	0.655	0.077	IFI6
0.739	0.047	TBC1D1	0.632	0.057	TERF2IP
0.791	0.111	CRYGD	0.643	0.077	UNC50
0.764	0.087	FRG1	0.687	0.123	PRMT1
0.756	0.081	ROR1	0.629	0.081	SPDEF
0.722	0.050	ALDH1L1	0.669	0.122	PSMD7
0.739	0.068	ELF3	0.657	0.114	SLC38A2
0.701	0.031	AURKA	0.640	0.098	ACVR2A
0.712	0.052	UFSP2	0.623	0.093	CENPA
0.699	0.044	COL4A3BP	0.567	0.053	GRB7
0.750	0.097	MGC12488	0.604	0.097	NIF3L1
0.723	0.075	ACSL4	0.595	0.090	USP3
0.717	0.074	SSBP1	0.621	0.118	KPNA2
0.696	0.056	ADD1	0.577	0.074	PIK3CA
0.724	0.085	HLCS	0.603	0.101	CCDC91
0.697	0.061	ST7	0.611	0.108	HIST3H2A
0.698	0.064	EPHB2	0.562	0.063	LBH
0.689	0.057	LSM3	0.529	0.031	ABCF3
0.708	0.088	VAMP3	0.602	0.108	SGPP1
0.684	0.073	KCNJ12	0.570	0.081	HMG2
0.691	0.081	TPBG	0.603	0.116	NDE1
0.709	0.103	PMS2P5	0.565	0.078	MCM6
0.673	0.069	TIPIN	0.614	0.132	BABAM1
0.691	0.090	C10ORF2	0.601	0.119	MRPL16
0.665	0.068	PPP2R2A	0.574	0.095	MX1
0.672	0.080	EYA2	0.561	0.113	PNMT
0.681	0.090	DRG1	0.532	0.086	TMSB15A
0.677	0.086	ZNF587	0.551	0.109	ARFIP2
0.635	0.054	TFCP2L1	0.610	0.172	MOSC1
0.645	0.065	IRX5	0.547	0.110	ABHD3
0.620	0.042	KIF15	0.531	0.098	CBR3
0.664	0.087	NIT2	0.557	0.125	IL32
0.698	0.123	EHB1	0.554	0.123	ALAS1

0.636	0.061	<u>LTBP2</u>	0.570	0.145	<u>RNF13</u>
0.681	0.107	<u>ZNF253</u>	0.555	0.132	<u>LMO3</u>
0.660	0.087	<u>SCAMP1</u>	0.510	0.088	<u>GNE</u>
0.683	0.115	<u>KCNS3</u>	0.541	0.124	<u>SUN2</u>
0.637	0.079	<u>PAAF1</u>	0.549	0.136	<u>ICT1</u>
0.644	0.088	<u>POLQ</u>	0.541	0.132	<u>PCTP</u>
0.611	0.054	<u>POLR3D</u>	0.570	0.169	<u>COPS7B</u>
0.627	0.072	<u>CYP26B1</u>	0.533	0.132	<u>FAM114A1</u>
0.620	0.072	<u>RRP1</u>	0.535	0.144	<u>SLC31A2</u>
0.656	0.108	<u>KIF13B</u>	0.518	0.134	<u>RECQL</u>
0.655	0.108	<u>EVI2B</u>	0.540	0.156	<u>AKAP8L</u>
0.650	0.104	<u>CLCN2</u>	0.535	0.152	<u>ARL6IP4</u>
0.621	0.081	<u>STEAP1</u>	0.554	0.174	<u>CTSK</u>
0.614	0.076	<u>ROBO4</u>	0.526	0.154	<u>RAB32</u>
0.642	0.109	<u>GFRA2</u>	0.514	0.147	<u>OSBPL1A</u>
0.603	0.075	<u>WNT11</u>	0.503	0.140	<u>MEX3C</u>
0.645	0.119	<u>C20ORF103</u>	0.532	0.170	<u>C7ORF68</u>
0.587	0.060	<u>CDA</u>	0.522	0.162	<u>AES</u>
0.585	0.071	<u>C20ORF46</u>	0.513	0.155	<u>MAP1LC3B</u>
0.591	0.081	<u>ZNF552</u>	0.507	0.151	<u>KCTD13</u>
0.657	0.155	<u>AHNAK</u>	0.507	0.166	<u>SMARCA5</u>
0.603	0.106	<u>IKBKB</u>	0.527	0.198	<u>SCMH1</u>
0.572	0.076	<u>HIST1H4B</u>	0.503	0.188	<u>MTMR14</u>
0.606	0.111	<u>DARS</u>			
0.628	0.133	<u>LOC100508797</u>			
0.582	0.093	<u>PARL</u>			
0.598	0.115	<u>PDLIM1</u>			
0.574	0.090	<u>KIAA1109</u>			
0.594	0.116	<u>FGL1</u>			
0.562	0.084	<u>KIAA0754</u>			
0.597	0.124	<u>MAP3K5</u>			
0.597	0.124	<u>ODF1</u>			
0.558	0.087	<u>TEAD1</u>			
0.591	0.122	<u>ERLIN2</u>			
0.548	0.081	<u>PPFIA1</u>			
0.568	0.104	<u>CGREF1</u>			
0.588	0.128	<u>WHSC1</u>			
0.568	0.111	<u>ZNF516</u>			
0.605	0.149	<u>SLC25A37</u>			
0.550	0.095	<u>FMNL1</u>			
0.589	0.137	<u>C1ORF114</u>			
0.585	0.136	<u>P2RY13</u>			
0.562	0.113	<u>ENPP1</u>			
0.613	0.164	<u>ART3</u>			
0.596	0.148	<u>C2CD2</u>			
0.549	0.106	<u>URGCP</u>			
0.619	0.176	<u>SERPINB7</u>			

0.572	0.130	<u>DCUN1D1</u>
0.561	0.122	LOC644450
0.552	0.115	<u>DNM1</u>
0.570	0.135	<u>LHX2</u>
0.580	0.144	<u>ADM</u>
0.521	0.087	<u>ITGA2</u>
0.511	0.079	<u>AMPD2</u>
0.532	0.101	C14ORF133
0.508	0.078	<u>DHRS2</u>
0.541	0.111	<u>NFKB1</u>
0.597	0.168	<u>PRRC2B</u>
0.548	0.125	<u>A4GALT</u>
0.544	0.121	<u>TLR2</u>
0.570	0.148	<u>ATP13A2</u>
0.560	0.141	<u>UBE2L3</u>
0.564	0.147	<u>KNG1</u>
0.560	0.145	<u>RIN1</u>
0.502	0.093	<u>BAGE</u>
0.528	0.119	<u>PPWD1</u>
0.567	0.159	GTF2H2B
0.563	0.156	TP53TG5
0.517	0.111	<u>KIAA0146</u>
0.541	0.135	<u>PTPRG</u>
0.522	0.117	<u>GALNT11</u>
0.540	0.137	<u>TLK1</u>
0.565	0.163	<u>IL2RG</u>
0.560	0.162	<u>CETP</u>
0.564	0.167	<u>SEMA5A</u>
0.547	0.151	<u>DDHD2</u>
0.520	0.126	PRRG2
0.523	0.131	<u>FICD</u>
0.542	0.154	LOC81691
0.502	0.116	<u>MLF1</u>
0.511	0.125	<u>CBR1</u>
0.501	0.119	<u>CRTAM</u>
0.529	0.149	<u>B4GALNT1</u>
0.521	0.147	<u>HNRPDL</u>
0.558	0.185	<u>KIAA0513</u>
0.540	0.174	<u>LASP1</u>
0.531	0.167	ZNF227
0.511	0.148	<u>RUFY2</u>
0.518	0.156	<u>KANK2</u>
0.514	0.153	<u>SERPINI1</u>
0.515	0.157	<u>KPNA5</u>
0.521	0.162	LOC646934
0.542	0.191	<u>MAGEA11</u>
0.524	0.174	<u>CENPC1</u>

0.506	0.163	<u>MUC16</u>
0.527	0.184	<u>ENC1</u>
0.507	0.164	<u>NDP</u>
0.536	0.194	<u>HHAT</u>
0.502	0.161	<u>UPF2</u>
0.529	0.189	<u>KCNC2</u>
0.538	0.200	<u>HLA-DMA</u>
0.502	0.178	<u>WDR44</u>
0.504	0.184	<u>PIK3CG</u>
0.502	0.185	<u>TCHH</u>
0.538	0.233	<u>EBF2</u>

VCAP_24h based prediction result

Pa	Pi	DownRegulation	Pa	Pi	UpRegulation
0.941	0.005	<u>IFT52</u>	0.977	0.007	<u>NPFFR1</u>
0.941	0.010	<u>UBE2O</u>	0.941	0.012	<u>EXTL1</u>
0.930	0.009	<u>RAD23A</u>	0.930	0.010	<u>PRRX1</u>
0.924	0.020	<u>MRPL49</u>	0.933	0.016	<u>SLC12A7</u>
0.920	0.025	<u>CLASRP</u>	0.919	0.011	<u>HIST1H2AJ</u>
0.899	0.010	<u>MLPH</u>	0.916	0.010	<u>CEP170</u>
0.890	0.005	<u>ACTR1B</u>	0.916	0.013	<u>PGS1</u>
0.901	0.029	<u>GCN1L1</u>	0.913	0.013	<u>ZNF324</u>
0.880	0.008	<u>GDI2</u>	0.908	0.009	<u>C19ORF60</u>
0.881	0.009	<u>CLDN1</u>	0.907	0.009	<u>C19ORF22</u>
0.895	0.024	<u>RBMX2</u>	0.905	0.009	<u>SNX16</u>
0.882	0.020	<u>HIF1AN</u>	0.907	0.013	<u>ATP2A3</u>
0.869	0.008	<u>TSPAN1</u>	0.915	0.022	<u>OLFM1</u>
0.883	0.024	<u>ABR</u>	0.909	0.016	<u>SND1</u>
0.875	0.019	<u>C15ORF44</u>	0.911	0.020	<u>RNF31</u>
0.884	0.031	<u>ANO1</u>	0.904	0.015	<u>CSNK1G3</u>
0.868	0.016	<u>SYBU</u>	0.883	0.004	<u>CIT</u>
0.854	0.014	<u>GTPBP3</u>	0.886	0.010	<u>KLK14</u>
0.849	0.013	<u>EPB41L2</u>	0.894	0.018	<u>NAT6</u>
0.860	0.029	<u>HPRT1</u>	0.895	0.022	<u>HLF</u>
0.863	0.033	<u>CLASP1</u>	0.897	0.028	<u>TBC1D12</u>
0.837	0.012	<u>NUP43</u>	0.878	0.010	<u>PLS3</u>
0.851	0.031	<u>KAT8</u>	0.883	0.017	<u>ITM2B</u>
0.828	0.012	<u>TSGA10</u>	0.874	0.008	<u>ACOT8</u>
0.847	0.034	<u>RBM7</u>	0.887	0.027	<u>DEXI</u>
0.844	0.039	<u>C16ORF7</u>	0.878	0.019	<u>PSENEN</u>
0.809	0.005	<u>NRN1</u>	0.876	0.021	<u>MPDZ</u>
0.851	0.049	<u>SETD1A</u>	0.869	0.019	<u>CARHSP1</u>
0.850	0.051	<u>PIAS3</u>	0.863	0.014	<u>DYNLT1</u>
0.844	0.047	<u>CEP85</u>	0.878	0.033	<u>CORO2B</u>
0.835	0.042	<u>EIF2B1</u>	0.864	0.019	<u>ZRSR2</u>
0.838	0.044	<u>SLC26A4</u>	0.853	0.011	<u>CCNB1</u>

0.817	0.025	<u>NUP107</u>	0.874	0.032	<u>CYR61</u>
0.799	0.010	<u>EHHADH</u>	0.879	0.039	<u>PDK2</u>
0.811	0.022	<u>IMPACT</u>	0.866	0.027	<u>CTNND2</u>
0.851	0.063	<u>EDEM2</u>	0.874	0.037	<u>TOX</u>
0.831	0.043	<u>P2RY2</u>	0.863	0.027	<u>ZNF783</u>
0.830	0.042	<u>NIPA2</u>	0.866	0.031	<u>NCDN</u>
0.819	0.032	<u>MORF4L2</u>	0.843	0.009	<u>KIF18A</u>
0.818	0.032	<u>ZNF473</u>	0.869	0.039	<u>OGN</u>
0.820	0.037	<u>SHMT2</u>	0.850	0.022	<u>PP14571</u>
0.811	0.029	<u>MRPL15</u>	0.856	0.029	<u>PEG3</u>
0.806	0.032	<u>AIFM1</u>	0.841	0.016	<u>FAM179B</u>
0.790	0.017	<u>AHNAK2</u>	0.853	0.029	<u>TRDV3</u>
0.782	0.011	<u>DAK</u>	0.857	0.034	<u>BMP5</u>
0.829	0.059	<u>KIAA1024</u>	0.863	0.044	<u>LTK</u>
0.798	0.035	<u>GDAP1L1</u>	0.845	0.027	<u>MFAP2</u>
0.806	0.043	<u>ARC</u>	0.859	0.041	<u>RAB11B</u>
0.785	0.022	<u>NOC3L</u>	0.836	0.019	<u>HIST1H2BI</u>
0.791	0.031	<u>EPRS</u>	0.866	0.051	<u>LCK</u>
0.800	0.041	<u>CGA</u>	0.843	0.029	<u>MAPRE3</u>
0.780	0.022	<u>RWDD2B</u>	0.844	0.032	<u>IFT88</u>
0.791	0.033	<u>ABCA3</u>	0.853	0.043	<u>AICDA</u>
0.800	0.043	<u>CCDC41</u>	0.845	0.038	<u>ISG15</u>
0.785	0.034	<u>ELF3</u>	0.833	0.026	<u>PIK3R2</u>
0.783	0.032	<u>KRT3</u>	0.835	0.029	<u>AQP8</u>
0.793	0.043	<u>SSR3</u>	0.821	0.016	<u>PCTP</u>
0.779	0.030	<u>SDAD1</u>	0.828	0.025	<u>JUNB</u>
0.785	0.036	<u>MAPT</u>	0.821	0.017	<u>DBI</u>
0.791	0.047	<u>PCYOX1L</u>	0.813	0.010	<u>CENPF</u>
0.780	0.038	<u>CS</u>	0.832	0.033	<u>CHMP4A</u>
0.786	0.049	<u>NUBP1</u>	0.826	0.028	<u>RSAD2</u>
0.780	0.044	<u>CKAP5</u>	0.830	0.033	<u>OSTF1</u>
0.773	0.038	<u>IARS</u>	0.830	0.034	<u>UBE2D3</u>
0.771	0.037	<u>IRX5</u>	0.811	0.015	<u>TOX3</u>
0.797	0.063	<u>MAP1LC3C</u>	0.832	0.037	<u>DGCR2</u>
0.764	0.031	<u>C16ORF88</u>	0.818	0.024	<u>SHARPIN</u>
0.759	0.029	<u>HOXC10</u>	0.820	0.026	<u>RGS5</u>
0.753	0.023	<u>LARS</u>	0.840	0.049	<u>DHX40</u>
0.773	0.044	<u>EIF4H</u>	0.816	0.026	<u>CSF2RB</u>
0.770	0.041	<u>CTCF</u>	0.801	0.014	<u>CMAS</u>
0.752	0.024	<u>ARHGAP4</u>	0.822	0.035	<u>SCARF1</u>
0.765	0.037	<u>ENPP2</u>	0.819	0.034	<u>MEST</u>
0.756	0.030	<u>PFAS</u>	0.825	0.041	<u>IFI44L</u>
0.739	0.014	<u>CLIC3</u>	0.824	0.039	<u>CD244</u>
0.759	0.035	<u>VSNL1</u>	0.807	0.024	<u>ANXA2</u>
0.761	0.037	<u>TMBIM4</u>	0.820	0.038	<u>GP1BB</u>
0.745	0.023	<u>SERPINE2</u>	0.827	0.045	<u>QPCTL</u>
0.757	0.037	<u>SCMH1</u>	0.791	0.010	<u>ITGAV</u>

0.846	0.127	<u>NTRK2</u>	0.825	0.050	<u>HPS6</u>
0.755	0.036	<u>SERPINI1</u>	0.811	0.036	<u>WNK1</u>
0.782	0.067	<u>IQCE</u>	0.807	0.033	<u>BPTF</u>
0.774	0.060	<u>MGLL</u>	0.806	0.037	<u>MT1E</u>
0.773	0.062	<u>GPN3</u>	0.787	0.020	<u>ADM</u>
0.733	0.024	<u>RAB4A</u>	0.795	0.029	<u>MATK</u>
0.752	0.047	<u>NIF3L1</u>	0.810	0.045	<u>NEBL</u>
0.756	0.055	<u>RPS6</u>	0.792	0.028	<u>IRF7</u>
0.750	0.051	<u>TBKBP1</u>	0.797	0.033	<u>FOXC2</u>
0.736	0.037	<u>SESN1</u>	0.779	0.017	<u>CD2AP</u>
0.738	0.039	<u>DNAJA4</u>	0.819	0.057	<u>ADRBK2</u>
0.759	0.061	<u>RELA</u>	0.799	0.038	<u>EGR4</u>
0.751	0.054	<u>AAGAB</u>	0.798	0.037	<u>MAP3K9</u>
0.731	0.035	<u>DPF1</u>	0.769	0.010	<u>TPX2</u>
0.724	0.029	<u>PFKM</u>	0.796	0.038	<u>KIF26B</u>
0.755	0.063	<u>PIGF</u>	0.803	0.045	<u>PTGER1</u>
0.755	0.064	<u>TCTN3</u>	0.805	0.047	<u>POU2F1</u>
0.754	0.065	<u>ACADS</u>	0.801	0.043	<u>PPIB</u>
0.745	0.057	<u>SH3D21</u>	0.800	0.046	<u>CDON</u>
0.748	0.060	<u>PLEKHB1</u>	0.848	0.095	<u>IGFBP2</u>
0.753	0.066	<u>FAM5C</u>	0.796	0.045	<u>B3GAT1</u>
0.750	0.064	<u>TPD52L2</u>	0.798	0.047	<u>PRKG1</u>
0.746	0.060	<u>WNT5A</u>	0.793	0.043	<u>ABCA11P</u>
0.733	0.048	<u>MAP1S</u>	0.794	0.045	<u>NUP50</u>
0.730	0.045	<u>NLE1</u>	0.836	0.088	<u>PDIA3</u>
0.763	0.081	<u>RIN2</u>	0.803	0.055	<u>CYP11B2</u>
0.742	0.061	<u>EIF2S2</u>	0.787	0.041	<u>CFB</u>
0.725	0.049	<u>FPGS</u>	0.770	0.024	<u>CYB561D2</u>
0.732	0.057	<u>MUC4</u>	0.757	0.011	<u>NCAPG</u>
0.747	0.075	<u>PDHA1</u>	0.798	0.056	<u>PEX16</u>
0.698	0.026	<u>TINF2</u>	0.783	0.042	<u>TOLLIP</u>
0.713	0.042	<u>RPH3AL</u>	0.778	0.039	<u>PCDHGA9</u>
0.695	0.025	<u>PALB2</u>	0.791	0.052	<u>SMYD3</u>
0.720	0.051	<u>COPG</u>	0.787	0.049	<u>CHAC1</u>
0.720	0.053	<u>LACTB2</u>	0.781	0.043	<u>C12ORF11</u>
0.732	0.065	<u>ANXA3</u>	0.778	0.041	<u>HIST1H2AI</u>
0.734	0.067	<u>KCTD5</u>	0.803	0.067	<u>RAB38</u>
0.732	0.067	<u>TTF1</u>	0.773	0.037	<u>FER</u>
0.728	0.063	<u>FLOT1</u>	0.767	0.033	<u>MKI67</u>
0.713	0.049	<u>CST3</u>	0.786	0.052	<u>ZNF280D</u>
0.728	0.064	<u>ADCY7</u>	0.778	0.045	<u>HAPLN2</u>
0.728	0.065	<u>CCHCR1</u>	0.789	0.056	<u>ARHGEF7</u>
0.708	0.046	<u>TIMM17B</u>	0.781	0.048	<u>CRISPLD2</u>
0.725	0.063	<u>ASPM</u>	0.779	0.049	<u>APOH</u>
0.706	0.045	<u>VCAM1</u>	0.768	0.040	<u>SMC4</u>
0.723	0.063	<u>RPL13A</u>	0.769	0.041	<u>AURKA</u>
0.743	0.083	<u>SULT1C2</u>	0.778	0.053	<u>CNGB1</u>

0.719	0.060	<u>MAK16</u>	0.738	0.016	<u>KIF23</u>
0.710	0.051	<u>SLPI</u>	0.764	0.043	<u>SLC35E3</u>
0.744	0.087	<u>SETD1B</u>	0.757	0.036	<u>DPY19L4</u>
0.736	0.079	<u>SF3A1</u>	0.770	0.050	<u>TSC2</u>
0.719	0.063	<u>UBA52</u>	0.748	0.028	<u>SAT1</u>
0.728	0.072	<u>TMEM180</u>	0.776	0.058	<u>SRGAP2</u>
0.727	0.073	<u>DDX24</u>	0.777	0.059	<u>CRB1</u>
0.686	0.033	<u>IFITM3</u>	0.749	0.033	<u>FOS</u>
0.691	0.038	<u>ALG3</u>	0.769	0.053	<u>HELLS</u>
0.677	0.024	<u>AZI1</u>	0.766	0.052	<u>TRPV6</u>
0.710	0.058	<u>FLNA</u>	0.780	0.067	<u>ARVCF</u>
0.697	0.045	LOC100286895	0.756	0.043	<u>HBXIP</u>
0.698	0.047	<u>C6ORF108</u>	0.766	0.052	<u>GP9</u>
0.701	0.050	<u>PRR7</u>	0.763	0.050	<u>APOBEC3B</u>
0.724	0.075	<u>PASK</u>	0.786	0.073	<u>LMO3</u>
0.730	0.083	<u>CLIC1</u>	0.773	0.061	<u>C14ORF132</u>
0.707	0.060	<u>CEACAM6</u>	0.746	0.035	<u>C2ORF28</u>
0.700	0.054	<u>B3GNT1</u>	0.770	0.059	<u>ZNF467</u>
0.720	0.074	<u>SLC6A6</u>	0.780	0.071	<u>SLC26A3</u>
0.739	0.094	<u>DLL3</u>	0.746	0.037	<u>FAM69A</u>
0.719	0.076	<u>FABP3</u>	0.756	0.047	<u>CCNA2</u>
0.697	0.054	<u>SKIV2L2</u>	0.787	0.080	<u>SAFB2</u>
0.715	0.075	<u>FAM125B</u>	0.774	0.068	<u>EIF2B2</u>
0.709	0.069	<u>AIMP1</u>	0.765	0.059	<u>ZMPSTE24</u>
0.715	0.076	<u>PNP</u>	0.779	0.075	<u>TAGLN3</u>
0.696	0.057	<u>PPRC1</u>	0.745	0.041	<u>TIPARP</u>
0.694	0.056	<u>WDR45</u>	0.750	0.046	<u>PTBP2</u>
0.713	0.075	<u>DNASE1L1</u>	0.760	0.059	<u>ZBED5</u>
0.704	0.066	<u>RUNDC3A</u>	0.751	0.050	<u>CRYBA2</u>
0.691	0.054	<u>PRPSAP2</u>	0.745	0.045	<u>LPPR1</u>
0.693	0.057	<u>PARP4</u>	0.755	0.056	<u>GLI1</u>
0.679	0.043	<u>GALNT6</u>	0.743	0.045	<u>C14ORF109</u>
0.697	0.062	<u>C20ORF103</u>	0.742	0.044	<u>PDZD7</u>
0.702	0.067	<u>LINC00472</u>	0.756	0.059	<u>UBB</u>
0.678	0.044	<u>SGPP1</u>	0.768	0.075	<u>TGFB2</u>
0.688	0.056	<u>PDS5A</u>	0.764	0.074	LOC100131532
0.705	0.073	<u>CLDN18</u>	0.736	0.046	<u>TARP</u>
0.678	0.046	<u>POLD2</u>	0.744	0.055	<u>VPS53</u>
0.722	0.090	<u>DSG3</u>	0.735	0.049	<u>CCL11</u>
0.704	0.073	<u>AKR1B10</u>	0.769	0.084	<u>KIAA0182</u>
0.681	0.051	<u>DIXDC1</u>	0.741	0.057	<u>POU6F1</u>
0.693	0.066	<u>MED15</u>	0.696	0.012	<u>DLGAP5</u>
0.695	0.070	<u>RNF187</u>	0.748	0.065	<u>DYNC2H1</u>
0.693	0.069	<u>ABCG1</u>	0.767	0.088	<u>MZB1</u>
0.701	0.078	<u>MRPL16</u>	0.746	0.068	<u>SLC13A4</u>
0.712	0.089	<u>CHMP7</u>	0.720	0.043	<u>ICAM2</u>
0.637	0.017	<u>TRIM17</u>	0.728	0.051	<u>RCHY1</u>

0.680	0.059	C20ORF4	0.733	0.057	AP3S1
0.706	0.087	ELANE	0.685	0.010	FOXMI
0.696	0.077	DAZAP2	0.728	0.053	SMC5
0.672	0.058	CD3EAP	0.736	0.062	TSSK2
0.691	0.077	C12ORF41	0.735	0.061	DOC2B
0.690	0.076	SLC7A10	0.730	0.058	HCCS
0.693	0.080	ZNF32	0.734	0.062	OAS1
0.671	0.058	FADS3	0.746	0.075	PDE4C
0.676	0.064	CCNB1IP1	0.734	0.064	CTBP2
0.697	0.084	DDX18	0.744	0.074	HIST1H2AB
0.651	0.039	RBM28	0.743	0.074	TCN2
0.672	0.061	ATR	0.731	0.062	MARCH6
0.680	0.069	PLEKHA1	0.710	0.042	FAM172A
0.691	0.082	SMARCC2	0.750	0.084	KIAA1310
0.669	0.061	OXA1L	0.742	0.077	DNM2
0.687	0.080	PDK4	0.717	0.054	SLC35D2
0.663	0.056	PTGES2	0.676	0.013	KIFC1
0.660	0.054	CHKB	0.710	0.050	XBP1
0.689	0.084	TPM4	0.700	0.043	SYNJ2BP
0.672	0.068	ECH1	0.720	0.062	MAK
0.686	0.083	SLC30A3	0.684	0.028	RDH14
0.675	0.073	DNAJC13	0.714	0.059	LRP5L
0.670	0.069	C1ORF61	0.713	0.058	TRA2A
0.678	0.078	U2AF1	0.724	0.070	ARL5A
0.660	0.060	DCK	0.729	0.075	HEG1
0.654	0.054	CHST15	0.670	0.017	ASPM
0.675	0.078	KDM2A	0.705	0.053	ROBO1
0.688	0.094	CUTC	0.705	0.054	GSTK1
0.711	0.120	TIMP4	0.720	0.069	RFPL2
0.668	0.077	BBS7	0.722	0.071	ZDHHC17
0.659	0.069	COPS7A	0.703	0.054	ELAVL3
0.648	0.058	TLR2	0.704	0.055	CCDC87
0.671	0.085	C19ORF42	0.681	0.033	DAD1
0.679	0.095	GNAL	0.729	0.081	CTNNA1
0.633	0.049	TMEM168	0.708	0.060	KIAA1797
0.648	0.066	LARP4	0.731	0.084	MED4
0.661	0.079	TMEM9B	0.702	0.056	CHI3L2
0.643	0.062	GAP43	0.684	0.037	KIF20A
0.632	0.052	PPL	0.718	0.071	IGLL3P
0.646	0.067	POF1B	0.705	0.058	COL5A1
0.657	0.078	SLC5A6	0.689	0.043	GALE
0.623	0.044	PIGB	0.705	0.059	TRIM33
0.632	0.054	CLCN5	0.713	0.067	ELL
0.657	0.079	PDIA4	0.714	0.069	PBX2
0.614	0.037	DCAF17	0.716	0.072	CD38
0.659	0.083	SPINT1	0.698	0.055	LHX1
0.654	0.078	ZHX2	0.709	0.066	GPRC5B

0.600	0.025	C22ORF36	0.728	0.086	NR4A1
0.649	0.074	ADAM10	0.712	0.070	CPB2
0.637	0.063	CIDEB	0.727	0.086	HS6ST1
0.656	0.082	COL9A3	0.689	0.050	F5
0.636	0.063	DMRT1	0.737	0.099	TREM2
0.665	0.092	OPHN1	0.719	0.081	CLDN5
0.643	0.075	RPS13	0.713	0.075	CYP2A13
0.639	0.072	PSMD3	0.731	0.093	MUC2
0.649	0.081	UGT2B28	0.682	0.045	HIST1H2BC
0.646	0.078	TMBIM6	0.715	0.078	LY6G6C
0.670	0.103	ZNF200	0.691	0.055	CORO2A
0.634	0.069	ABCB4	0.705	0.070	MGC12488
0.640	0.076	INTS3	0.707	0.073	ACAP1
0.644	0.082	MPPE1	0.661	0.027	FKBP1B
0.659	0.098	EIF2D	0.734	0.100	KLK5
0.658	0.098	MUC5AC	0.723	0.089	VPS41
0.618	0.058	SLC41A3	0.695	0.063	JTB
0.664	0.106	UBL4A	0.704	0.073	RAI1
0.656	0.098	PTPN11	0.693	0.063	USP32
0.624	0.066	MTMR11	0.719	0.088	SHOX2
0.632	0.080	RPL27	0.695	0.065	ANKRD12
0.622	0.071	ZNF219	0.717	0.087	NCR2
0.626	0.076	APPL1	0.703	0.075	RECQL
0.636	0.087	RPS29	0.711	0.085	ACAD8
0.608	0.058	PGAM2	0.708	0.083	SMAD2
0.606	0.058	AARS	0.683	0.058	COL4A4
0.631	0.083	DPYSL2	0.705	0.081	SUPV3L1
0.637	0.089	RUVBL1	0.703	0.080	PDLIM4
0.619	0.071	RPL13	0.694	0.071	POLR2J4
0.627	0.079	COL11A1	0.676	0.055	DDA1
0.690	0.143	SH3BP1	0.704	0.084	MVK
0.618	0.073	SCD5	0.699	0.079	TMEM212
0.668	0.124	CTSB	0.694	0.074	EN2
0.630	0.089	SERPINA4	0.689	0.069	USP9X
0.675	0.134	CA10	0.706	0.087	TCF20
0.680	0.140	CYFIP1	0.716	0.098	LOC202181
0.657	0.118	CALML4	0.699	0.082	ECE1
0.598	0.061	BRIX1	0.676	0.060	TUFT1
0.615	0.078	MSL3	0.713	0.097	AP2A2
0.630	0.094	TMCO3	0.702	0.087	MS4A1
0.658	0.122	SLC25A24	0.671	0.055	MOGS
0.606	0.071	NT5DC2	0.663	0.048	GTF2B
0.619	0.086	C2ORF56	0.689	0.074	NCAPH2
0.585	0.053	LPPR3	0.708	0.092	SCNN1G
0.626	0.094	YLP1M1	0.674	0.060	ZNF646
0.584	0.052	DUSP22	0.635	0.021	HJURP
0.616	0.084	CAD	0.694	0.080	YOD1

0.613	0.083	<u>TJP3</u>	0.710	0.096	<u>PNLIPRP1</u>
0.662	0.132	<u>RSRC1</u>	0.691	0.077	<u>ETV7</u>
0.621	0.091	<u>C1ORF183</u>	0.689	0.076	<u>FBXL8</u>
0.620	0.092	<u>LAMB3</u>	0.690	0.078	<u>LRRC8B</u>
0.605	0.078	<u>FAM60A</u>	0.684	0.071	<u>MARCH5</u>
0.578	0.051	<u>FOXF2</u>	0.687	0.075	<u>TM9SF1</u>
0.582	0.056	<u>APLNR</u>	0.692	0.080	<u>FGF3</u>
0.619	0.094	<u>VAT1</u>	0.678	0.067	<u>SIRT7</u>
0.637	0.114	<u>DDB2</u>	0.666	0.056	<u>SPAG1</u>
0.607	0.084	<u>COL6A2</u>	0.670	0.061	<u>MLXIPL</u>
0.597	0.075	<u>TRAP1</u>	0.681	0.073	<u>ITPR2</u>
0.617	0.096	<u>DKC1</u>	0.690	0.082	<u>PCDHA10</u>
0.614	0.093	<u>KCNG1</u>	0.659	0.053	<u>RBM12B</u>
0.655	0.136	<u>ALS2CL</u>	0.687	0.083	<u>WSCD1</u>
0.593	0.074	<u>EMD</u>	0.699	0.094	<u>TMEM40</u>
0.638	0.120	<u>ANO3</u>	0.681	0.078	<u>EXT2</u>
0.584	0.068	<u>WDR74</u>	0.698	0.095	<u>SYDE1</u>
0.599	0.084	<u>ARL14</u>	0.659	0.061	<u>POLI</u>
0.598	0.084	<u>GRB10</u>	0.674	0.076	<u>EFHC1</u>
0.619	0.105	<u>ARL1</u>	0.698	0.101	<u>OXCT2</u>
0.646	0.131	<u>AHCTF1</u>	0.679	0.083	<u>TAGLN</u>
0.610	0.098	<u>C7ORF42</u>	0.652	0.058	<u>SULT1A2</u>
0.620	0.109	<u>PAAF1</u>	0.687	0.093	<u>ARHGAP22</u>
0.585	0.075	<u>TCEA2</u>	0.674	0.082	<u>DNAJB1</u>
0.580	0.071	<u>ARHGAP15</u>	0.634	0.043	<u>NME1</u>
0.589	0.080	<u>RHOBTB2</u>	0.675	0.087	<u>FAM174B</u>
0.644	0.135	<u>PTGES3</u>	0.670	0.083	<u>COLQ</u>
0.614	0.106	<u>BCL7A</u>	0.614	0.028	<u>CNDP2</u>
0.647	0.139	<u>PIEZO2</u>	0.679	0.094	<u>NRIP2</u>
0.615	0.109	<u>PTPN2</u>	0.646	0.061	<u>EIF3L</u>
0.599	0.094	<u>OPA1</u>	0.625	0.040	<u>TUBA1A</u>
0.587	0.082	<u>PYROXD1</u>	0.650	0.067	<u>ZNF573</u>
0.602	0.097	<u>RSL24D1</u>	0.664	0.084	<u>EPS15L1</u>
0.618	0.113	<u>RPL12</u>	0.669	0.089	<u>MCPH1</u>
0.611	0.107	<u>POLR2D</u>	0.657	0.077	<u>CGA</u>
0.593	0.088	<u>IRAK1</u>	0.642	0.062	<u>TMPRSS2</u>
0.621	0.118	<u>TRIP10</u>	0.674	0.094	<u>TBC1D8</u>
0.600	0.097	<u>ESYT1</u>	0.669	0.090	<u>TTC38</u>
0.624	0.122	<u>RPL22</u>	0.678	0.100	<u>TSPYL5</u>
0.595	0.096	<u>MFF</u>	0.668	0.090	<u>CDK20</u>
0.572	0.075	<u>DMBT1</u>	0.653	0.076	<u>NHP2</u>
0.564	0.068	<u>NUDT3</u>	0.677	0.101	<u>HOXA4</u>
0.588	0.092	<u>HADHB</u>	0.633	0.057	<u>GABARAPL1</u>
0.598	0.103	<u>ABCG2</u>	0.665	0.089	<u>LOC729799</u>
0.612	0.117	<u>DDX54</u>	0.658	0.082	<u>IGF1</u>
0.596	0.103	<u>TMEM97</u>	0.654	0.080	<u>SORL1</u>
0.603	0.110	<u>GNA12</u>	0.659	0.086	<u>TBCB</u>

0.636	0.143	<u>BLNK</u>	0.616	0.043	<u>ORMDL2</u>
0.608	0.117	<u>MREG</u>	0.671	0.098	<u>SYT12</u>
0.577	0.085	<u>LINC00341</u>	0.675	0.103	<u>CEACAM7</u>
0.552	0.061	<u>FHL5</u>	0.655	0.083	<u>ZNF204P</u>
0.565	0.074	<u>PRG4</u>	0.646	0.075	<u>IRF1</u>
0.594	0.104	<u>RPL30</u>	0.677	0.106	<u>KCNMB2</u>
0.588	0.100	<u>PLP1</u>	0.661	0.091	<u>CARD10</u>
0.586	0.098	<u>ICAM1</u>	0.635	0.070	<u>CCDC19</u>
0.643	0.156	<u>CD19</u>	0.615	0.050	<u>KIF14</u>
0.611	0.124	<u>FXYD3</u>	0.660	0.096	<u>ALLC</u>
0.588	0.102	<u>PNMA1</u>	0.637	0.074	<u>FSTL1</u>
0.623	0.138	<u>CAPN3</u>	0.651	0.088	<u>PIGZ</u>
0.551	0.069	<u>NSMAF</u>	0.619	0.057	<u>C21ORF91</u>
0.605	0.123	<u>GSTM4</u>	0.654	0.092	<u>AGAP2</u>
0.586	0.104	<u>ANPEP</u>	0.665	0.104	<u>ZNF33B</u>
0.601	0.120	<u>RSBN1</u>	0.591	0.029	<u>CDC20</u>
0.613	0.132	<u>UNC119</u>	0.645	0.084	<u>SIX5</u>
0.576	0.097	<u>LOC100129361</u>	0.650	0.089	<u>C8G</u>
0.621	0.143	<u>FAM134B</u>	0.606	0.046	<u>HOMER2</u>
0.606	0.128	<u>PTGIR</u>	0.658	0.098	<u>MEIS2</u>
0.578	0.102	<u>RPS24</u>	0.665	0.106	<u>PVRIG</u>
0.587	0.111	<u>RPL23A</u>	0.665	0.105	<u>EFR3B</u>
0.547	0.072	<u>NFX1</u>	0.590	0.032	<u>CDCA8</u>
0.585	0.113	<u>SIM1</u>	0.654	0.098	<u>HEXA</u>
0.578	0.107	<u>NSDHL</u>	0.639	0.083	<u>ACPP</u>
0.607	0.135	<u>CPSF6</u>	0.639	0.083	<u>FOXJ1</u>
0.588	0.118	<u>SLC30A9</u>	0.663	0.108	<u>TCEAL2</u>
0.582	0.113	<u>TNS3</u>	0.646	0.091	<u>BTBD18</u>
0.567	0.099	<u>RPL9</u>	0.599	0.045	<u>PLK1</u>
0.607	0.138	<u>FAM55C</u>	0.637	0.083	<u>BRD4</u>
0.561	0.093	<u>APTX</u>	0.654	0.100	<u>ERV3-2</u>
0.558	0.090	<u>TMEM5</u>	0.615	0.062	<u>NID2</u>
0.586	0.118	<u>PGRMC1</u>	0.635	0.083	<u>FCGR2A</u>
0.560	0.093	<u>ACAT1</u>	0.665	0.112	<u>SIX3</u>
0.607	0.141	<u>EVPL</u>	0.640	0.088	<u>AASS</u>
0.574	0.107	<u>CRADD</u>	0.655	0.103	<u>GPR21</u>
0.562	0.095	<u>PIPOX</u>	0.643	0.091	<u>MFNG</u>
0.596	0.130	<u>DYNC2LI1</u>	0.670	0.118	<u>RNF126</u>
0.554	0.088	<u>POT1</u>	0.646	0.095	<u>PKDREJ</u>
0.567	0.101	<u>CHCHD8</u>	0.641	0.091	<u>HSPA4</u>
0.584	0.118	<u>ARNTL</u>	0.641	0.091	<u>REPIN1</u>
0.563	0.098	<u>CBX7</u>	0.651	0.102	<u>TNFRSF17</u>
0.583	0.119	<u>MEIS1</u>	0.641	0.092	<u>CHST15</u>
0.593	0.129	<u>MTMR4</u>	0.658	0.110	<u>FABP2</u>
0.588	0.124	<u>DLG5</u>	0.663	0.117	<u>MYBPH</u>
0.597	0.134	<u>PTMA</u>	0.623	0.077	<u>GOLPH3L</u>
0.560	0.097	<u>ABCA8</u>	0.664	0.118	<u>RAB3D</u>

0.572	0.109	<u>KIAA0922</u>	0.623	0.078	<u>MMADHC</u>
0.555	0.093	<u>NOL6</u>	0.661	0.117	<u>OR1F1</u>
0.576	0.114	<u>LAMP1</u>	0.650	0.106	<u>CHRNA6</u>
0.526	0.065	<u>PKP1</u>	0.638	0.094	<u>C7ORF58</u>
0.602	0.143	<u>SLC35C2</u>	0.633	0.090	<u>LNPEP</u>
0.544	0.086	<u>ZNF710</u>	0.641	0.098	<u>WDR59</u>
0.593	0.137	<u>CPSF7</u>	0.630	0.089	<u>GADD45G</u>
0.565	0.109	<u>DUSP8</u>	0.637	0.096	<u>CDKN2B</u>
0.564	0.109	<u>MFN2</u>	0.609	0.069	<u>IFI44</u>
0.580	0.126	<u>M6PR</u>	0.660	0.121	<u>OBFC2B</u>
0.537	0.083	<u>HDAC5</u>	0.633	0.094	<u>SRSF7</u>
0.561	0.107	<u>RNF4</u>	0.650	0.111	<u>SRSF4</u>
0.563	0.110	<u>DNAJB12</u>	0.635	0.097	<u>FMOD</u>
0.593	0.141	<u>SNN</u>	0.635	0.097	<u>PLIN2</u>
0.557	0.105	<u>TFCP2</u>	0.632	0.095	<u>SCFD1</u>
0.589	0.138	<u>LSM3</u>	0.632	0.095	<u>SOAT1</u>
0.513	0.062	<u>AOC2</u>	0.645	0.108	<u>PSD</u>
0.566	0.117	<u>MYO1C</u>	0.632	0.096	<u>HLA-DOA</u>
0.533	0.084	<u>HOXC4</u>	0.631	0.095	<u>LINC00115</u>
0.563	0.115	<u>PCTP</u>	0.640	0.103	<u>EFNA1</u>
0.564	0.117	<u>RALGPS1</u>	0.623	0.086	<u>RNF111</u>
0.559	0.112	<u>RGS2</u>	0.638	0.103	<u>HIST3H3</u>
0.548	0.102	<u>NMT1</u>	0.635	0.100	<u>MTCH2</u>
0.556	0.110	<u>RPS9</u>	0.659	0.124	<u>GALR3</u>
0.508	0.063	<u>HOXC11</u>	0.650	0.116	<u>LRRC8E</u>
0.594	0.150	<u>TAC3</u>	0.642	0.109	<u>GYG2</u>
0.545	0.101	<u>FLNB</u>	0.651	0.119	<u>CLOCK</u>
0.559	0.115	<u>RSRC2</u>	0.637	0.106	<u>RORC</u>
0.561	0.118	<u>SLC39A4</u>	0.615	0.085	<u>C20ORF46</u>
0.553	0.111	<u>SUMO3</u>	0.619	0.090	<u>LAD1</u>
0.530	0.088	<u>AKAP3</u>	0.614	0.085	<u>POLR2J2</u>
0.569	0.127	<u>PLEK2</u>	0.643	0.115	<u>LGI1</u>
0.564	0.125	<u>SAR1B</u>	0.637	0.109	<u>ARFRP1</u>
0.573	0.135	<u>ZFAND1</u>	0.612	0.085	<u>VNN2</u>
0.523	0.085	<u>PPP2R5A</u>	0.620	0.093	<u>TK1</u>
0.567	0.129	<u>LINS</u>	0.619	0.092	<u>CPEB3</u>
0.519	0.081	<u>ATG14</u>	0.570	0.043	<u>KCMF1</u>
0.568	0.130	<u>RPLP1</u>	0.626	0.099	<u>SLC7A4</u>
0.548	0.111	<u>RPL23</u>	0.656	0.131	<u>KCNK3</u>
0.524	0.088	<u>ERN2</u>	0.636	0.111	<u>FGF16</u>
0.575	0.139	<u>INPP5F</u>	0.640	0.117	<u>OGFR</u>
0.551	0.115	<u>TRPC4AP</u>	0.643	0.120	<u>RABGGTA</u>
0.527	0.093	<u>RPS3</u>	0.599	0.076	<u>ASCC1</u>
0.572	0.138	<u>CCK</u>	0.630	0.107	<u>PTCD3</u>
0.546	0.113	<u>RAF1</u>	0.632	0.110	<u>EBLN2</u>
0.541	0.108	<u>MYLK</u>	0.633	0.112	<u>TEKT2</u>
0.530	0.098	<u>C22ORF29</u>	0.598	0.077	<u>DYM</u>

0.601	0.170	<u>MYLK3</u>	0.616	0.095	<u>MELK</u>
0.565	0.133	<u>DAG1</u>	0.633	0.112	<u>FGFR4</u>
0.535	0.103	<u>TCL1B</u>	0.622	0.101	<u>DCN</u>
0.551	0.120	<u>FKSG49</u>	0.621	0.101	<u>CDX1</u>
0.521	0.091	<u>JAK1</u>	0.621	0.102	<u>CRP</u>
0.553	0.123	<u>SEL1L3</u>	0.637	0.117	<u>HIST1H1D</u>
0.542	0.113	<u>MORC2</u>	0.625	0.106	<u>MYH7B</u>
0.570	0.141	<u>GRSF1</u>	0.613	0.095	<u>KRT8P12</u>
0.536	0.110	<u>ISL1</u>	0.599	0.080	<u>NVL</u>
0.546	0.120	<u>WDR73</u>	0.621	0.103	<u>SLC37A1</u>
0.553	0.127	<u>ABHD2</u>	0.639	0.121	<u>NDUFS6</u>
0.539	0.114	<u>LILRB3</u>	0.621	0.104	<u>HTR1B</u>
0.548	0.123	<u>ITGA10</u>	0.629	0.112	<u>CLDN11</u>
0.541	0.116	<u>NFYB</u>	0.608	0.092	<u>PPP2R3C</u>
0.560	0.136	<u>VWA5A</u>	0.639	0.124	<u>LSM14A</u>
0.547	0.123	<u>STRN3</u>	0.614	0.099	<u>FLJ13197</u>
0.535	0.111	<u>KLKB1</u>	0.634	0.120	<u>PSMC1</u>
0.544	0.121	<u>ACADL</u>	0.627	0.114	<u>FGF18</u>
0.568	0.146	<u>PLA2G15</u>	0.561	0.048	<u>TCFL5</u>
0.568	0.147	<u>PIGL</u>	0.636	0.124	<u>C22ORF24</u>
0.547	0.126	<u>RPL21</u>	0.633	0.122	<u>GCNT2</u>
0.503	0.083	<u>PLK1</u>	0.618	0.108	<u>GPR31</u>
0.531	0.112	<u>GEMIN4</u>	0.582	0.072	<u>CIB1</u>
0.535	0.116	<u>CYP2B7P1</u>	0.612	0.103	<u>VPS13B</u>
0.510	0.091	<u>RRP1</u>	0.622	0.113	<u>IST1</u>
0.563	0.144	<u>WDR26</u>	0.604	0.095	<u>SERPIND1</u>
0.569	0.152	<u>UBXN6</u>	0.608	0.100	<u>PDE9A</u>
0.536	0.119	<u>CCNF</u>	0.603	0.096	<u>PRSS8</u>
0.555	0.139	<u>C10ORF95</u>	0.626	0.119	<u>PLA2G4A</u>
0.515	0.099	<u>IER3</u>	0.621	0.114	<u>ANXA2P3</u>
0.553	0.137	<u>GABPB1</u>	0.590	0.084	<u>SCGB1D2</u>
0.554	0.139	<u>RPSA</u>	0.621	0.115	<u>USP27X</u>
0.530	0.114	<u>ALDOC</u>	0.646	0.141	<u>MRPL22</u>
0.542	0.129	<u>PGRMC2</u>	0.625	0.120	<u>PDLIM2</u>
0.538	0.126	<u>WFS1</u>	0.622	0.118	<u>BMP3</u>
0.562	0.150	<u>ARPC3</u>	0.609	0.105	<u>SMTN</u>
0.561	0.149	<u>CRYL1</u>	0.543	0.039	<u>ATP5I</u>
0.557	0.145	<u>C12ORF48</u>	0.595	0.091	<u>KLK3</u>
0.507	0.095	<u>SMYD5</u>	0.583	0.083	<u>CRNN</u>
0.550	0.139	<u>ZBED1</u>	0.616	0.116	<u>DFFA</u>
0.536	0.126	<u>LIAS</u>	0.619	0.119	<u>TAPBPL</u>
0.520	0.110	<u>BCORL1</u>	0.605	0.106	<u>PPIL2</u>
0.558	0.148	<u>DCLRE1C</u>	0.588	0.090	<u>EAF2</u>
0.539	0.129	<u>SLC22A18</u>	0.613	0.115	<u>TUB</u>
0.574	0.164	<u>HNRNPH2</u>	0.608	0.111	<u>TTLL5</u>
0.504	0.095	<u>CEP192</u>	0.588	0.092	<u>ASL</u>
0.546	0.137	<u>RPS12</u>	0.607	0.112	<u>GAMT</u>

0.529	0.121	<u>C7ORF49</u>	0.598	0.103	<u>GOLPH3</u>
0.521	0.113	<u>KBTBD4</u>	0.608	0.114	<u>DZIP1</u>
0.532	0.126	<u>FAM193A</u>	0.608	0.115	<u>TNFSF4</u>
0.549	0.144	<u>ZNF142</u>	0.617	0.123	<u>KLF15</u>
0.591	0.186	<u>CBY1</u>	0.607	0.114	<u>ADAM11</u>
0.553	0.148	<u>FERMT1</u>	0.604	0.111	<u>BICD1</u>
0.538	0.133	<u>EFNA3</u>	0.594	0.102	<u>MBIP</u>
0.518	0.113	<u>RBM15B</u>	0.616	0.124	<u>ZNF221</u>
0.537	0.132	<u>MAN2B2</u>	0.605	0.114	<u>LOC647070</u>
0.539	0.135	<u>SERHL2</u>	0.640	0.149	<u>CLPS</u>
0.505	0.100	<u>SLC22A4</u>	0.526	0.035	<u>CDC25B</u>
0.541	0.138	<u>HERC2</u>	0.629	0.138	<u>CD3G</u>
0.533	0.129	<u>KIAA0100</u>	0.587	0.098	<u>LPHN3</u>
0.534	0.131	<u>DTWD1</u>	0.602	0.113	<u>SPTSSA</u>
0.544	0.142	<u>RNF220</u>	0.596	0.108	<u>ITIH1</u>
0.536	0.133	<u>ACTA1</u>	0.569	0.082	<u>PEX13</u>
0.531	0.129	<u>PMP22</u>	0.621	0.134	<u>TMBIM4</u>
0.547	0.145	<u>DSN1</u>	0.603	0.117	<u>ZNF180</u>
0.566	0.164	<u>DDX1</u>	0.558	0.072	<u>DERL2</u>
0.560	0.159	<u>MOSPD2</u>	0.577	0.091	<u>EFCAB2</u>
0.530	0.130	<u>FXN</u>	0.605	0.120	<u>KHSRP</u>
0.516	0.116	<u>CTSE</u>	0.599	0.113	<u>HESX1</u>
0.544	0.145	<u>SSB</u>	0.612	0.127	<u>IQGAP2</u>
0.507	0.108	<u>CGRRF1</u>	0.614	0.130	<u>MRPL42</u>
0.527	0.128	<u>SCG5</u>	0.594	0.111	<u>TFAP2B</u>
0.553	0.154	<u>HOXD11</u>	0.609	0.126	<u>SCAP</u>
0.527	0.129	<u>SIX2</u>	0.610	0.127	<u>CHRM4</u>
0.509	0.112	<u>CD96</u>	0.606	0.123	<u>SCN3B</u>
0.549	0.154	<u>AASDHPPT</u>	0.601	0.119	<u>CREB3L1</u>
0.572	0.178	<u>GNL1</u>	0.610	0.128	<u>STAG2</u>
0.514	0.121	<u>SPEG</u>	0.575	0.094	<u>FAM178A</u>
0.531	0.137	<u>CTSL1</u>	0.613	0.133	<u>FRMPD1</u>
0.513	0.121	<u>PTMS</u>	0.613	0.133	<u>NDUFAB1</u>
0.519	0.127	<u>RETSAT</u>	0.562	0.083	<u>TMEM121</u>
0.539	0.147	<u>NFYA</u>	0.597	0.121	<u>UBA7</u>
0.539	0.149	<u>SF3A3</u>	0.569	0.094	<u>BBC3</u>
0.539	0.149	<u>CDK5RAP2</u>	0.590	0.115	<u>GAS1</u>
0.506	0.117	<u>KLHL9</u>	0.539	0.064	<u>UGDH</u>
0.577	0.188	<u>HRASLS</u>	0.599	0.125	<u>ACAA2</u>
0.558	0.170	<u>PPP1R9A</u>	0.602	0.128	<u>BSN</u>
0.576	0.189	<u>LOC100127972</u>	0.614	0.140	<u>PEX2</u>
0.552	0.165	<u>MPZ</u>	0.607	0.133	<u>MTSS1</u>
0.523	0.138	<u>AQP3</u>	0.608	0.135	<u>ZBED4</u>
0.560	0.175	<u>DEFB1</u>	0.584	0.111	<u>CXXC4</u>
0.534	0.150	<u>SAFB2</u>	0.592	0.119	<u>DTX3</u>
0.523	0.142	<u>RPL4</u>	0.578	0.106	<u>TMEM66</u>
0.506	0.125	<u>TMEM33</u>	0.602	0.131	<u>LOC100508797</u>

0.561	0.180	C2ORF44	0.566	0.094	APRT
0.510	0.129	H2BFS	0.592	0.120	MAGI1
0.519	0.140	EEF1G	0.604	0.133	C9ORF167
0.519	0.140	C4BPB	0.593	0.121	YES1
0.527	0.149	EEF1A1	0.580	0.109	SPHK1
0.501	0.122	CETP	0.539	0.068	NRIP1
0.504	0.126	RABL3	0.579	0.108	VPS35
0.523	0.145	DLG1	0.578	0.107	GBP1
0.545	0.167	GJB1	0.608	0.137	FBN1
0.545	0.168	STAT5B	0.614	0.145	IL11
0.561	0.187	E4F1	0.599	0.131	TPO
0.515	0.141	CRTAP	0.573	0.105	KIAA0196
0.529	0.155	PSMC3IP	0.587	0.120	PROSC
0.517	0.147	UBE2D2	0.587	0.120	MKRN2
0.503	0.134	SLC33A1	0.539	0.075	CRELD2
0.538	0.169	TFF2	0.574	0.110	FANCI
0.565	0.196	RHBG	0.540	0.076	CTDSP1
0.513	0.145	MOB3B	0.594	0.131	CWF19L1
0.503	0.136	GSN	0.579	0.116	PHTF1
0.509	0.143	WDR61	0.569	0.106	HIST1H2AM
0.527	0.162	RPL34	0.578	0.116	DYSF
0.518	0.153	RPS2	0.564	0.103	PITX3
0.502	0.137	ZNF358	0.571	0.111	LSM14B
0.504	0.139	FAIM2	0.599	0.139	TM4SF5
0.521	0.156	FUCA1	0.556	0.097	HELZ
0.505	0.143	PPIP5K1	0.541	0.082	PLP2
0.529	0.167	RASSF4	0.561	0.103	LHFPL2
0.514	0.153	PSMD1	0.583	0.125	SMARCA1
0.522	0.161	CAND1	0.572	0.114	CLDN8
0.522	0.162	TBL1XR1	0.608	0.151	HMGB2
0.530	0.171	PHF16	0.567	0.110	TM9SF3
0.505	0.148	DKK4	0.537	0.080	TCF15
0.501	0.146	CHERP	0.552	0.095	PSMA6
0.542	0.188	SMEK2	0.580	0.124	HIST1H4B
0.529	0.176	DCUN1D2	0.586	0.130	ZNF93
0.524	0.171	AQP5	0.568	0.113	AMPD3
0.531	0.180	ERC2	0.579	0.124	FOXD2
0.503	0.152	ZKSCAN5	0.601	0.146	LRRC68
0.531	0.181	CD7	0.570	0.116	NKX3-1
0.506	0.156	SNUPN	0.591	0.137	LIFR
0.501	0.153	RPLP0	0.575	0.121	TNFRSF13B
0.514	0.169	GPBP1L1	0.566	0.114	RNF138
0.505	0.161	UQCC	0.571	0.120	HEATR8
0.501	0.158	TGIF1	0.572	0.121	HDAC6
0.507	0.165	HSP90AB1	0.557	0.107	FUT7
0.514	0.174	RUNX3	0.564	0.114	LENEP
0.516	0.177	DIO1	0.558	0.108	ALDH1A3

0.507	0.169	<u>MRAS</u>	0.548	0.099	<u>RANBP6</u>
0.505	0.167	<u>RPS4X</u>	0.572	0.124	<u>EDN2</u>
0.503	0.169	LOC100507009	0.581	0.133	<u>RGS3</u>
0.513	0.180	<u>EPB49</u>	0.551	0.103	<u>RPL13P5</u>
0.510	0.177	<u>CPNE7</u>	0.580	0.132	<u>PCDHGA1</u>
0.538	0.208	<u>PHLDA3</u>	0.570	0.123	<u>SLC4A2</u>
0.516	0.189	<u>HR</u>	0.580	0.134	<u>RGS11</u>
0.505	0.187	<u>DNASE1L2</u>	0.541	0.096	<u>PTTG3P</u>
0.508	0.191	PKD1P1	0.575	0.130	<u>KDM6B</u>
0.520	0.204	<u>CRYAB</u>	0.554	0.108	<u>IFIT1</u>
0.505	0.198	<u>MARCH8</u>	0.538	0.093	<u>RRAGA</u>
0.504	0.237	<u>GATA4</u>	0.579	0.134	<u>SLC28A2</u>
			0.571	0.128	<u>CEACAM1</u>
			0.580	0.137	<u>SAA3P</u>
			0.570	0.128	<u>ADAM20</u>
			0.555	0.113	<u>YIF1B</u>
			0.591	0.150	<u>ATF2</u>
			0.573	0.132	<u>SPTBN5</u>
			0.513	0.073	<u>RND1</u>
			0.587	0.148	<u>MUC3A</u>
			0.572	0.134	ZNF226
			0.565	0.128	<u>TRMT12</u>
			0.558	0.122	<u>CPNE3</u>
			0.578	0.143	ZNF277
			0.547	0.113	<u>ERG</u>
			0.565	0.130	C7ORF54
			0.543	0.109	<u>NKTR</u>
			0.573	0.138	<u>MINPP1</u>
			0.571	0.137	<u>FKSG2</u>
			0.566	0.132	<u>GJB4</u>
			0.567	0.134	<u>PRLH</u>
			0.576	0.143	<u>TROVE2</u>
			0.530	0.097	<u>SCAMP3</u>
			0.554	0.122	<u>TTC23</u>
			0.584	0.152	<u>CELA3B</u>
			0.547	0.116	<u>THRAP3</u>
			0.553	0.122	<u>ALPI</u>
			0.552	0.121	<u>CELP</u>
			0.518	0.088	<u>LCN2</u>
			0.530	0.100	ZNF268
			0.563	0.133	<u>CASP6</u>
			0.573	0.143	GNG13
			0.555	0.125	<u>DENND4A</u>
			0.556	0.127	<u>STAP1</u>
			0.589	0.160	<u>MRPS15</u>
			0.544	0.117	<u>PAF1</u>
			0.552	0.125	<u>NELL2</u>

	0.547	0.120	<u>FZD5</u>
	0.561	0.136	<u>INPP4A</u>
	0.560	0.134	<u>C22ORF29</u>
	0.557	0.132	<u>IL17RA</u>
	0.559	0.134	<u>IQCA1</u>
	0.556	0.132	<u>MMP11</u>
	0.562	0.139	<u>APOL3</u>
	0.530	0.107	<u>SPTBN4</u>
	0.575	0.152	<u>C1ORF106</u>
	0.547	0.125	<u>IL1RAPL1</u>
	0.558	0.136	<u>CEACAM4</u>
	0.542	0.120	<u>MBOAT2</u>
	0.523	0.102	<u>EIF3D</u>
	0.548	0.128	<u>TSPAN1</u>
	0.556	0.135	<u>HOXB1</u>
	0.549	0.128	<u>SLC25A16</u>
	0.563	0.145	<u>CGGBP1</u>
	0.565	0.147	<u>SCAPER</u>
	0.508	0.090	<u>SDCBP</u>
	0.563	0.147	<u>AHSG</u>
	0.552	0.137	<u>CLSTN3</u>
	0.535	0.120	ARHGAP33
	0.544	0.130	<u>SEMA3F</u>
	0.545	0.131	<u>LAP3</u>
	0.537	0.123	GRRP1
	0.549	0.135	<u>UBXN1</u>
	0.563	0.150	<u>ATP9B</u>
	0.534	0.121	<u>BTN3A3</u>
	0.556	0.143	CETN1
	0.555	0.144	<u>GCH1</u>
	0.574	0.163	<u>SNRPB2</u>
	0.542	0.131	<u>GAS2L1</u>
	0.552	0.142	<u>PRKAR1A</u>
	0.554	0.145	<u>FAM153A</u>
	0.549	0.141	<u>C1ORF174</u>
	0.544	0.135	<u>ATP10B</u>
	0.517	0.109	<u>CXCL13</u>
	0.547	0.140	<u>NDUFB8</u>
	0.546	0.139	<u>CLDN15</u>
	0.547	0.140	<u>SPPL2B</u>
	0.559	0.153	<u>ACOX2</u>
	0.561	0.154	<u>NOD1</u>
	0.546	0.141	KLRAP1
	0.554	0.148	<u>MASP2</u>
	0.557	0.152	<u>PBXIP1</u>
	0.542	0.138	<u>AFF4</u>
	0.518	0.114	<u>CERK</u>

	0.538	0.135	<u>PIAS3</u>
	0.553	0.150	<u>PLXNA2</u>
	0.535	0.132	<u>FAM171A1</u>
	0.549	0.146	<u>CISH</u>
	0.538	0.135	<u>TOP3B</u>
	0.527	0.125	<u>SEPT8</u>
	0.525	0.123	<u>GIMAP6</u>
	0.514	0.114	<u>CSNK2A2</u>
	0.556	0.156	<u>ADAM7</u>
	0.539	0.139	<u>LGR5</u>
	0.537	0.138	<u>CLDN9</u>
	0.534	0.134	<u>IFITM1</u>
	0.562	0.162	<u>H2AFZ</u>
	0.509	0.109	<u>USP47</u>
	0.549	0.150	<u>OCM2</u>
	0.536	0.138	<u>SYNJ2</u>
	0.509	0.111	<u>PCP4</u>
	0.555	0.157	<u>PLAC8</u>
	0.546	0.150	<u>SGSH</u>
	0.548	0.152	<u>PFDN1</u>
	0.554	0.158	<u>LSM2</u>
	0.523	0.128	<u>C3ORF64</u>
	0.526	0.131	<u>NFKB2</u>
	0.526	0.132	<u>ADPGK</u>
	0.523	0.129	<u>HIST1H1T</u>
	0.543	0.150	<u>SEC24D</u>
	0.531	0.138	<u>CTIF</u>
	0.531	0.138	<u>SCNN1A</u>
	0.504	0.111	<u>CKS2</u>
	0.535	0.143	<u>CDK18</u>
	0.544	0.152	<u>NEUROG3</u>
	0.542	0.152	<u>FAM198B</u>
	0.513	0.124	<u>TRIM36</u>
	0.515	0.126	<u>FAM168B</u>
	0.537	0.148	<u>NT5C</u>
	0.551	0.164	<u>OBSL1</u>
	0.522	0.135	<u>F10</u>
	0.525	0.138	<u>ATAD5</u>
	0.541	0.156	<u>METTL10</u>
	0.530	0.146	<u>PAK7</u>
	0.526	0.142	<u>LANCL1</u>
	0.538	0.156	<u>GPR161</u>
	0.521	0.139	<u>RPRD1A</u>
	0.532	0.150	<u>MLPH</u>
	0.519	0.137	<u>MAPK8</u>
	0.529	0.148	<u>MAPK4</u>
	0.534	0.153	<u>FAM125B</u>

	0.536	0.157	<u>SF3B5</u>
	0.544	0.166	<u>ECM1</u>
	0.522	0.144	<u>PKN2</u>
	0.528	0.150	<u>HRH3</u>
	0.546	0.168	<u>HOXA3</u>
	0.530	0.152	<u>ADH1C</u>
	0.510	0.133	<u>PCNX</u>
	0.527	0.150	<u>DBF4B</u>
	0.519	0.142	<u>IGH@</u>
	0.517	0.141	<u>GHRHR</u>
	0.510	0.133	<u>POLR2K</u>
	0.540	0.164	<u>GALNT8</u>
	0.534	0.158	<u>ACE</u>
	0.523	0.148	<u>ABL2</u>
	0.530	0.156	<u>POMC</u>
	0.534	0.159	<u>RBM41</u>
	0.524	0.150	<u>ZNF282</u>
	0.530	0.156	<u>FZD6</u>
	0.505	0.132	<u>CCDC70</u>
	0.535	0.162	<u>MEP1A</u>
	0.535	0.162	<u>SULF1</u>
	0.512	0.139	<u>TAF4B</u>
	0.523	0.151	<u>PTPRN2</u>
	0.516	0.144	<u>ATOH1</u>
	0.541	0.169	<u>HOXB5</u>
	0.525	0.154	<u>TTLL3</u>
	0.524	0.154	<u>CLDN3</u>
	0.528	0.159	<u>RRAS2</u>
	0.523	0.154	<u>KIR2DL4</u>
	0.503	0.138	<u>RRP8</u>
	0.524	0.160	<u>ARHGEF4</u>
	0.524	0.160	<u>ZNF606</u>
	0.521	0.159	<u>RIC3</u>
	0.515	0.153	<u>PAX5</u>
	0.507	0.145	<u>S100BPB</u>
	0.529	0.168	<u>SPAG9</u>
	0.507	0.146	<u>PPP1R13B</u>
	0.518	0.157	<u>GPN2</u>
	0.506	0.145	<u>CCDC134</u>
	0.522	0.162	<u>PLEKHM1</u>
	0.521	0.161	<u>TANK</u>
	0.541	0.181	<u>LIMCH1</u>
	0.509	0.150	<u>UBE2A</u>
	0.519	0.160	<u>RASGRP2</u>
	0.517	0.158	<u>SSX5</u>
	0.507	0.148	<u>GPR97</u>
	0.511	0.153	<u>EPM2A</u>

	0.504	0.147	<u>SRRM1</u>
	0.525	0.168	<u>FLT1</u>
	0.503	0.146	<u>NOTCH2</u>
	0.514	0.157	<u>NEU3</u>
	0.514	0.157	<u>CEP112</u>
	0.533	0.176	<u>HMGN3</u>
	0.516	0.161	AMELY
	0.515	0.160	CA5B
	0.518	0.165	<u>SLC22A6</u>
	0.529	0.176	<u>MTRR</u>
	0.503	0.149	<u>CNR1</u>
	0.512	0.160	<u>CWH43</u>
	0.513	0.163	<u>BUB1</u>
	0.507	0.157	<u>RIMBP2</u>
	0.505	0.156	<u>GNRH2</u>
	0.513	0.164	KIAA0894
	0.504	0.157	<u>CCDC71</u>
	0.515	0.169	<u>UBR2</u>
	0.504	0.158	ZNF287
	0.519	0.174	<u>ACTL7A</u>
	0.504	0.160	<u>LHB</u>
	0.509	0.165	<u>ADAMTS12</u>
	0.509	0.165	<u>ZER1</u>
	0.513	0.171	<u>OFD1</u>
	0.514	0.174	<u>SYN2</u>
	0.516	0.179	<u>MCMBP</u>
	0.504	0.167	<u>TMEM147</u>
	0.501	0.165	<u>FGF23</u>
	0.508	0.172	<u>SLC26A2</u>
	0.514	0.180	<u>UBN1</u>
	0.509	0.176	C8ORF60
	0.507	0.175	<u>PHF20</u>
	0.501	0.171	<u>SH3BGRL3</u>
	0.502	0.172	<u>EIF2C2</u>
	0.506	0.176	ACSM1
	0.503	0.174	<u>HPCAL1</u>
	0.507	0.178	<u>CLINT1</u>
	0.502	0.174	CCDC40
	0.504	0.176	<u>IFT27</u>
	0.506	0.183	<u>SLC6A7</u>
	0.506	0.182	GIPR
	0.501	0.184	<u>ELAVL4</u>

Combination prediction result

<u>Name</u>	<u>Overlap count</u>	<u>Up</u>	<u>Down</u>	<u>Result</u>
<u>PTPN2</u>	6	3	3	
<u>AURKA</u>	5	2	3	
<u>CCNO</u>	5	3	2	
<u>CEP57</u>	5	2	3	
<u>EAF2</u>	5	2	3	
<u>KIAA0753</u>	5	2	3	
<u>OPA1</u>	5	2	3	
<u>PLEC</u>	5	1	4	
<u>RBM23</u>	5	3	2	
<u>SPHK1</u>	5	2	3	
<u>SREK1</u>	5	2	3	
<u>TMPRSS2</u>	5	4	1	
<u>TNFRSF1A</u>	5	3	2	
<u>TUBA4A</u>	5	3	2	
<u>ZNF277</u>	5	3	2	
<u>ZNF32</u>	5	2	3	
<u>ZNF45</u>	5	2	3	
<u>ADM</u>	4	3	1	
<u>AKAP8</u>	4	1	3	
<u>ALKBH1</u>	4	2	2	
<u>ANKRD12</u>	4	3	1	
<u>APPL1</u>	4	1	3	
<u>ARMC8</u>	4	2	2	
<u>ARMCX5</u>	4	1	3	
<u>ARNT2</u>	4	1	3	
<u>ASPH</u>	4	2	2	
<u>ATG5</u>	4	2	2	
<u>BCL7C</u>	4	2	2	
<u>BCLAF1</u>	4	2	2	
<u>BNIP1</u>	4	1	3	
<u>CBR3</u>	4	3	1	
<u>CCL2</u>	4	2	2	
<u>CD22</u>	4	2	2	
<u>CDCA4</u>	4	2	2	
<u>CDT1</u>	4	3	1	
<u>CHST15</u>	4	1	3	
<u>COQ9</u>	4	2	2	
<u>CTSB</u>	4	2	2	
<u>DCAF17</u>	4	2	2	
<u>DERL2</u>	4	2	2	
<u>DHX40</u>	4	2	2	
<u>DNAJB12</u>	4	2	2	
<u>DNAJC10</u>	4	1	3	
<u>DOCK4</u>	4	1	3	
<u>EEF1B2</u>	4	2	2	

<u>EFNA3</u>	4	1	3	
<u>EHD1</u>	4	3	1	
<u>EIF2B2</u>	4	3	1	
<u>EIF5B</u>	4	1	3	
<u>FDXR</u>	4	3	1	
<u>FEM1B</u>	4	1	3	
<u>FKBP5</u>	4	3	1	
<u>FOXC1</u>	4	2	2	
<u>FTL</u>	4	1	3	
<u>FUBP1</u>	4	1	3	
<u>GAA</u>	4	3	1	
<u>GMEB2</u>	4	2	2	
<u>GRB10</u>	4	1	3	
<u>GRN</u>	4	1	3	
<u>GRSF1</u>	4	1	3	
<u>HERC1</u>	4	2	2	
<u>HIBCH</u>	4	1	3	
<u>HIST1H2BE</u>	4	3	1	
<u>HMGCR</u>	4	2	2	
<u>HSPA4</u>	4	4	0	
<u>ID1</u>	4	4	0	
<u>IER3</u>	4	2	2	
<u>IFIT1</u>	4	3	1	
<u>IGF2R</u>	4	3	1	
<u>ISL1</u>	4	2	2	
<u>ITGA6</u>	4	1	3	
<u>IVNS1ABP</u>	4	1	3	
<u>KCNIP1</u>	4	2	2	
<u>KIAA0664L3</u>	4	2	2	
<u>KIAA1324</u>	4	2	2	
<u>KLHL9</u>	4	2	2	
<u>KRAS</u>	4	2	2	
<u>KRT10</u>	4	3	1	
<u>LAD1</u>	4	2	2	
<u>MAP3K9</u>	4	2	2	
<u>MAST4</u>	4	0	4	
<u>MRPL16</u>	4	1	3	
<u>MRPS31</u>	4	2	2	
<u>MTMR4</u>	4	1	3	
<u>MYBL1</u>	4	2	2	
<u>NAP1L2</u>	4	2	2	
<u>NFKBIL1</u>	4	1	3	
<u>NFX1</u>	4	2	2	
<u>NME1</u>	4	2	2	
<u>NR3C1</u>	4	2	2	
<u>NUBP1</u>	4	1	3	
<u>NVL</u>	4	3	1	
<u>OSBPL1A</u>	4	1	3	

<u>PAAF1</u>	4	1	3	
<u>PARP2</u>	4	0	4	
<u>PCP4</u>	4	2	2	
<u>PDS5B</u>	4	3	1	
<u>PHB</u>	4	1	3	
<u>PODXL</u>	4	2	2	
<u>POLG2</u>	4	1	3	
<u>PPCDC</u>	4	2	2	
<u>PPME1</u>	4	3	1	
<u>PTCD3</u>	4	2	2	
<u>PTPN9</u>	4	1	3	
<u>PTRH2</u>	4	1	3	
<u>PWP1</u>	4	2	2	
<u>PYROXD1</u>	4	1	3	
<u>RAD9A</u>	4	2	2	
<u>RCOR1</u>	4	3	1	
<u>SAMM50</u>	4	2	2	
<u>SEC61A2</u>	4	2	2	
<u>SETD1B</u>	4	1	3	
<u>SFXN3</u>	4	2	2	
<u>SIDT1</u>	4	2	2	
<u>SLC12A2</u>	4	2	2	
<u>SLC25A37</u>	4	1	3	
<u>SLC35E3</u>	4	1	3	
<u>SLC39A4</u>	4	2	2	
<u>SPRED2</u>	4	3	1	
<u>SRSF5</u>	4	2	2	
<u>STEAP1</u>	4	2	2	
<u>STK39</u>	4	2	2	
<u>STRN3</u>	4	2	2	
<u>SUV420H1</u>	4	1	3	
<u>SYK</u>	4	2	2	
<u>TACC1</u>	4	2	2	
<u>TBC1D1</u>	4	2	2	
<u>TBCC</u>	4	2	2	
<u>TBL1XR1</u>	4	1	3	
<u>THBD</u>	4	1	3	
<u>TLK1</u>	4	1	3	
<u>TRIM33</u>	4	3	1	
<u>TRIM36</u>	4	3	1	
<u>TTI1</u>	4	1	3	
<u>TXNL4B</u>	4	2	2	
<u>UBE2C</u>	4	2	2	
<u>UBE2D3</u>	4	2	2	
<u>UCP2</u>	4	2	2	
<u>UFL1</u>	4	2	2	
<u>UNKL</u>	4	2	2	
<u>UQCRCF1</u>	4	2	2	

<u>VDR</u>	4	3	1	
<u>ZFAND1</u>	4	2	2	
<u>ZNF148</u>	4	2	2	
<u>ZNF23</u>	4	2	2	
<u>ZNF239</u>	4	2	2	
<u>ZNF337</u>	4	1	3	
<u>ZNF7</u>	4	1	3	
<u>ZNF783</u>	4	3	1	
<u>ZNF93</u>	4	2	2	
<u>AASDHPPT</u>	3	1	2	
<u>ABCA11P</u>	3	2	1	
<u>ABCC5</u>	3	0	3	
<u>ABCF3</u>	3	1	2	
<u>ABHD3</u>	3	3	0	
<u>ACAT1</u>	3	1	2	
<u>ACD</u>	3	0	3	
<u>ACOT9</u>	3	1	2	
<u>ACSL3</u>	3	1	2	
<u>ADARB1</u>	3	1	2	
<u>ADCK3</u>	3	1	2	
<u>ADH1C</u>	3	1	2	
<u>ADNP2</u>	3	2	1	
<u>ADO</u>	3	1	2	
<u>AFF1</u>	3	1	2	
<u>AFF4</u>	3	2	1	
<u>AGPAT3</u>	3	2	1	
<u>AGXT2L1</u>	3	1	2	
<u>AHSA1</u>	3	1	2	
<u>AIMP1</u>	3	0	3	
<u>AKAP17A</u>	3	2	1	
<u>AKIP1</u>	3	1	2	
<u>ALAD</u>	3	1	2	
<u>ALAS1</u>	3	1	2	
<u>ALG13</u>	3	1	2	
<u>ALMS1</u>	3	0	3	
<u>ALS2CL</u>	3	1	2	
<u>ANKH</u>	3	1	2	
<u>ANO1</u>	3	1	2	
<u>APOBEC3B</u>	3	2	1	
<u>APOE</u>	3	3	0	
<u>APPBP2</u>	3	2	1	
<u>APT-X</u>	3	0	3	
<u>ARCN1</u>	3	2	1	
<u>ARFGAP2</u>	3	3	0	
<u>ARFIP2</u>	3	2	1	
<u>ARHGAP17</u>	3	1	2	
<u>ARHGEF26</u>	3	1	2	
<u>ARHGEF7</u>	3	3	0	

<u>ARID4A</u>	3	2	1	
<u>ARID5B</u>	3	2	1	
<u>ARL1</u>	3	0	3	
<u>ARMC6</u>	3	1	2	
<u>ASCC1</u>	3	1	2	
<u>ASCC3</u>	3	2	1	
<u>ASNA1</u>	3	2	1	
<u>ATF2</u>	3	2	1	
<u>ATG4A</u>	3	2	1	
<u>ATIC</u>	3	0	3	
<u>ATMIN</u>	3	0	3	
<u>ATP5C1</u>	3	2	1	
<u>ATP5O</u>	3	1	2	
<u>B4GALT1</u>	3	2	1	
<u>BAIAP2</u>	3	2	1	
<u>BANK1</u>	3	2	1	
<u>BBS7</u>	3	1	2	
<u>BCL2</u>	3	2	1	
<u>BICD1</u>	3	2	1	
<u>BLM</u>	3	1	2	
<u>BMI1</u>	3	1	2	
<u>BMPR1A</u>	3	1	2	
<u>BPGM</u>	3	0	3	
<u>BPIFA1</u>	3	1	2	
<u>BRE</u>	3	1	2	
<u>BRF2</u>	3	1	2	
<u>BRMS1</u>	3	2	1	
<u>BTG1</u>	3	2	1	
<u>C14ORF133</u>	3	1	2	
<u>C19ORF24</u>	3	2	1	
<u>C20ORF103</u>	3	1	2	
<u>C21ORF91</u>	3	2	1	
<u>C22ORF29</u>	3	2	1	
<u>C2ORF47</u>	3	2	1	
<u>C3</u>	3	2	1	
<u>C4ORF29</u>	3	1	2	
<u>C8ORF4</u>	3	2	1	
<u>CALM3</u>	3	2	1	
<u>CAMKK2</u>	3	2	1	
<u>CASP7</u>	3	2	1	
<u>CAT</u>	3	2	1	
<u>CBR4</u>	3	0	3	
<u>CCDC15</u>	3	1	2	
<u>CCHCR1</u>	3	1	2	
<u>CCNA2</u>	3	2	1	
<u>CCNE2</u>	3	2	1	
<u>CCNT1</u>	3	2	1	
<u>CCT6A</u>	3	1	2	

<u>CD80</u>	3	1	2	
<u>CDC16</u>	3	0	3	
<u>CDC42EP2</u>	3	1	2	
<u>CDC42EP4</u>	3	1	2	
<u>CDCP1</u>	3	1	2	
<u>CDK17</u>	3	2	1	
<u>CDR2L</u>	3	1	2	
<u>CEACAM6</u>	3	1	2	
<u>CEBPD</u>	3	2	1	
<u>CENPF</u>	3	3	0	
<u>CEP290</u>	3	2	1	
<u>CEP70</u>	3	1	2	
<u>CEP76</u>	3	1	2	
<u>CEPT1</u>	3	1	2	
<u>CETP</u>	3	1	2	
<u>CFLAR</u>	3	2	1	
<u>CGA</u>	3	2	1	
<u>CGGBP1</u>	3	2	1	
<u>CHAF1A</u>	3	2	1	
<u>CHD9</u>	3	2	1	
<u>CHERP</u>	3	2	1	
<u>CHKB</u>	3	2	1	
<u>CISH</u>	3	2	1	
<u>CITED2</u>	3	2	1	
<u>CLCN3</u>	3	1	2	
<u>CLMN</u>	3	1	2	
<u>CMAS</u>	3	1	2	
<u>CNOT6</u>	3	2	1	
<u>COCH</u>	3	2	1	
<u>COL17A1</u>	3	1	2	
<u>COL4A3BP</u>	3	1	2	
<u>COL5A1</u>	3	2	1	
<u>COPS6</u>	3	2	1	
<u>COPS7B</u>	3	1	2	
<u>CPSF7</u>	3	2	1	
<u>CPT1A</u>	3	1	2	
<u>CRBN</u>	3	1	2	
<u>CRCP</u>	3	2	1	
<u>CREBL2</u>	3	1	2	
<u>CRELD2</u>	3	3	0	
<u>CRKL</u>	3	3	0	
<u>CRNKL1</u>	3	1	2	
<u>CSDE1</u>	3	2	1	
<u>CSNK2A2</u>	3	2	1	
<u>CSRP2</u>	3	2	1	
<u>CTBP1</u>	3	1	2	
<u>CTGF</u>	3	1	2	
<u>CTSK</u>	3	2	1	

<u>CTSL2</u>	3	1	2	
<u>CXCL10</u>	3	3	0	
<u>CYB5R1</u>	3	1	2	
<u>CYP11B2</u>	3	2	1	
<u>CYP26A1</u>	3	2	1	
<u>CYP26B1</u>	3	1	2	
<u>CYP27B1</u>	3	2	1	
<u>CYR61</u>	3	2	1	
<u>DAAM1</u>	3	3	0	
<u>DARS</u>	3	1	2	
<u>DCK</u>	3	1	2	
<u>DCUN1D2</u>	3	1	2	
<u>DDX17</u>	3	2	1	
<u>DDX31</u>	3	1	2	
<u>DDX52</u>	3	2	1	
<u>DEGS1</u>	3	3	0	
<u>DEK</u>	3	1	2	
<u>DENND2D</u>	3	1	2	
<u>DENND4A</u>	3	2	1	
<u>DENND4B</u>	3	1	2	
<u>DENND4C</u>	3	1	2	
<u>DERA</u>	3	2	1	
<u>DIAPH2</u>	3	1	2	
<u>DIO2</u>	3	1	2	
<u>DIP2C</u>	3	1	2	
<u>DIXDC1</u>	3	1	2	
<u>DLAT</u>	3	1	2	
<u>DLD</u>	3	2	1	
<u>DLG1</u>	3	2	1	
<u>DNAJA3</u>	3	1	2	
<u>DNAJB9</u>	3	1	2	
<u>DSE</u>	3	1	2	
<u>DUSP12</u>	3	1	2	
<u>DUSP3</u>	3	1	2	
<u>DYRK2</u>	3	1	2	
<u>DZIP3</u>	3	2	1	
<u>EBP</u>	3	1	2	
<u>ECHDC3</u>	3	2	1	
<u>EFHD2</u>	3	2	1	
<u>EFNB2</u>	3	1	2	
<u>EGR3</u>	3	2	1	
<u>EIF2B3</u>	3	0	3	
<u>EIF2C3</u>	3	2	1	
<u>EIF3A</u>	3	1	2	
<u>EIF4ENIF1</u>	3	1	2	
<u>ELF2</u>	3	3	0	
<u>ELF3</u>	3	1	2	
<u>ELF5</u>	3	2	1	

<u>ELK4</u>	3	2	1	
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<u>ST6GAL1</u>	2	2	0	
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<u>SYNCRIP</u>	2	0	2	
<u>SYNJ2BP</u>	2	2	0	
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<u>WISP2</u>	2	2	0	
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<u>ZC3H14</u>	2	0	2	
<u>ZDHHC17</u>	2	2	0	
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<u>ZEB2</u>	2	0	2	
<u>ZFC3H1</u>	2	0	2	
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