

# SwissTargetPrediction

Target	Common name	Uniprot ID	ChEMBL ID	Target Class	Probability*	Known actives (3D/2D)
Cyclooxygenase-1 (by homology)	Ptgs1	P22437	CHEMBL2649	Enzyme	1.0	29 / 10
Transient receptor potential cation channel subfamily A member 1 (by homology)	Trpa1	Q8BLA8	CHEMBL1075310	Voltage-gated ion channel	0.245005854395	4 / 1
Histone deacetylase 6 (by homology)	Hdac6	Q9Z2V5	CHEMBL2878	Eraser	0.053517944289	5 / 0
Androgen Receptor (by homology)	Ar	P19091	CHEMBL3056	Nuclear receptor	0.0439186325197	20 / 9
Serine/threonine-protein kinase Aurora-A (by homology)	Aurka	P97477	CHEMBL2211	Kinase	0.0439186325197	5 / 0
Dopamine transporter (by homology)	Slc6a3	Q61327	CHEMBL2799	Electrochemical transporter	0.0439186325197	4 / 12
Tyrosinase (by homology)	Tyr	P11344	CHEMBL5346	Oxidoreductase	0.0439186325197	2 / 8
Indoleamine 2,3-dioxygenase 1 (by homology)	Ido1	P28776	CHEMBL1075294	Enzyme	0.0439186325197	12 / 0
11-beta-hydroxysteroid dehydrogenase 1	Hsd11b1	P50172	CHEMBL3910	Enzyme	0.0439186325197	29 / 0
Histone deacetylase 8 (by homology)	Hdac8	Q8VH37	CHEMBL2347	Eraser	0.0439186325197	9 / 4
Melanocortin receptor 4 (by homology)	Mc4r	P56450	CHEMBL3719	Family A G protein-coupled receptor	0.0439186325197	1 / 0
Nitric-oxide synthase, endothelial (by homology)	Nos3	P70313	CHEMBL2643	Enzyme	0.0439186325197	8 / 0
Muscarinic acetylcholine receptor M2 (by homology)	Chrm2	Q9ERZ4	CHEMBL3197	Family A G protein-coupled receptor	0.0439186325197	3 / 1
Muscarinic acetylcholine receptor M1 (by homology)	Chrm1	P12657	CHEMBL3733	Family A G protein-coupled receptor	0.0439186325197	3 / 1
Alkaline phosphatase tissue-nonspecific (by homology)	Alpl	P09242	CHEMBL2660	Enzyme	0.0	5 / 0
Mitogen-activated protein kinase 9 (by homology)	Mapk9	Q9WTU6	CHEMBL2034797	Kinase	0.0	3 / 0
Norepinephrine transporter (by homology)	Slc6a2	O55192	CHEMBL2370	Electrochemical transporter	0.0	2 / 4
Cannabinoid CB1	Cnr1	P47746	CHEMBL3037	Family A G protein-	0.0	8 / 34

Target	Common name	Uniprot ID	ChEMBL ID	Target Class	Probability*	Known actives (3D/2D)
receptor (by homology)				coupled receptor		
Histone deacetylase 1 (by homology)	Hdac1	O09106	CHEMBL4001	Eraser	0.0	7 / 0
Arachidonate 12-lipoxygenase (by homology)	Alox12	P39655	CHEMBL3225	Enzyme	0.0	0 / 7
Dual specificity protein kinase CLK1 (by homology)	Clk1	P22518	CHEMBL1075280	Enzyme	0.0	0 / 1
DNA polymerase beta (by homology)	Polb	Q8K409	CHEMBL4565	Enzyme	0.0	0 / 3
Serotonin 2c (5-HT2c) receptor (by homology)	Htr2c	P34968	CHEMBL3006	Family A G protein-coupled receptor	0.0	8 / 3
Dopamine D1 receptor (by homology)	Drd1	Q61616	CHEMBL3071	Family A G protein-coupled receptor	0.0	8 / 2
Platelet-derived growth factor receptor	Pdgfrb	P05622	CHEMBL2749	Kinase	0.0	2 / 0
RAC-alpha serine/threonine-protein kinase (by homology)	Akt1	P31750	CHEMBL5859	Kinase	0.0	6 / 0
Acetylcholinesterase (by homology)	Ache	P21836	CHEMBL3198	Hydrolase	0.0	10 / 8
D-amino-acid oxidase (by homology)	Dao	P18894	CHEMBL2331068	Enzyme	0.0	5 / 0
Epoxide hydratase (by homology)	Ephx2	P34914	CHEMBL4140	Protease	0.0	30 / 0
Testosterone 17-beta-dehydrogenase 3 (by homology)	Hsd17b3	P70385	CHEMBL1932905	Enzyme	0.0	4 / 0
Tyrosine-protein kinase JAK3 (by homology)	Jak3	Q62137	CHEMBL5250	Kinase	0.0	15 / 0
Dopamine D2 receptor (by homology)	Drd2	P61168	CHEMBL3427	Family A G protein-coupled receptor	0.0	6 / 43
Beta-1 adrenergic receptor (by homology)	Adrb1	P34971	CHEMBL3440	Family A G protein-coupled receptor	0.0	0 / 8
Beta-2 adrenergic receptor (by homology)	Adrb2	P18762	CHEMBL3707	Family A G protein-coupled receptor	0.0	0 / 21
Estrogen receptor beta (by homology)	Esr2	O08537	CHEMBL2995	Nuclear receptor	0.0	24 / 66
Histamine H4 receptor (by homology)	Hrh4	Q91ZY2	CHEMBL5657	Family A G protein-coupled receptor	0.0	31 / 0
C-C chemokine receptor type 2 (by homology)	Ccr2	P51683	CHEMBL5412	Family A G protein-coupled receptor	0.0	2 / 0

Target	Common name	Uniprot ID	ChEMBL ID	Target Class	Probability*	Known actives (3D/2D)
Epoxide hydrolase 1 (by homology)	Ephx1	Q9D379	CHEMBL1075293	Protease	0.0	10 / 0
Cathepsin K (by homology)	Ctsk	P55097	CHEMBL1075277	Protease	0.0	11 / 0
Estrogen receptor alpha (by homology)	Esr1	P19785	CHEMBL3065	Nuclear receptor	0.0	22 / 63
Monoamine oxidase A (by homology)	Maoa	Q64133	CHEMBL3681	Enzyme	0.0	7 / 2
Serotonin transporter (by homology)	Slc6a4	Q60857	CHEMBL4642	Electrochemical transporter	0.0	4 / 6
Thrombin (by homology)	F2	P19221	CHEMBL1075308	Protease	0.0	2 / 0
Catechol O-methyltransferase (by homology)	Comt	O88587	CHEMBL3286068	Transferase	0.0	0 / 2
ADP-ribosyl cyclase/ cyclic ADP-ribose hydrolase 1	Cd38	P56528	CHEMBL3425388	Enzyme	0.0	11 / 0
Monoglyceride lipase (by homology)	Mgll	O35678	CHEMBL5774	Enzyme	0.0	2 / 0
Butyrylcholinesterase (by homology)	Bche	Q03311	CHEMBL2528	Hydrolase	0.0	3 / 0
Inosine-5'-monophosphate dehydrogenase 2 (by homology)	Impdh2	P24547	CHEMBL3169	Oxidoreductase	0.0	7 / 0
Beta-3 adrenergic receptor (by homology)	Adrb3	P25962	CHEMBL4030	Family A G protein-coupled receptor	0.0	0 / 3
Serine/threonine-protein kinase B-raf (by homology)	Braf	P28028	CHEMBL2331061	Kinase	0.0	10 / 0
5,6-dihydroxyindole-2-carboxylic acid oxidase	Tyrp1	P07147	CHEMBL3638355	Oxidoreductase	0.0	0 / 1
Delta opioid receptor (by homology)	Oprd1	P32300	CHEMBL3222	Family A G protein-coupled receptor	0.0	5 / 16
Adenosine A1 receptor (by homology)	Adora1	Q60612	CHEMBL3688	Family A G protein-coupled receptor	0.0	5 / 0
Tyrosine-protein kinase FYN (by homology)	Fyn	P39688	CHEMBL4517	Kinase	0.0	0 / 3
Metabotropic glutamate receptor 5 (by homology)	Grm5	Q3UVX5	CHEMBL1641352	Family C G protein-coupled receptor	0.0	6 / 0
Fatty acid synthase (by homology)	Fasn	P19096	CHEMBL1795189	Transferase	0.0	0 / 1
Glycogen synthase kinase-3 beta (by homology)	Gsk3b	Q9WV60	CHEMBL1075321	Kinase	0.0	11 / 0
MAP kinase p38 alpha (by homology)	Mapk14	P47811	CHEMBL2336	Kinase	0.0	7 / 0

Target	Common name	Uniprot ID	ChEMBL ID	Target Class	Probability*	Known actives (3D/2D)
Arachidonate 5-lipoxygenase	Alox5	P48999	CHEMBL5211	Oxidoreductase	0.0	3 / 8
Serine/threonine-protein kinase 12 (by homology)	Aurkb	O70126	CHEMBL1075275	Kinase	0.0	4 / 0
Glycogen synthase kinase-3 alpha (by homology)	Gsk3a	Q2NL51	CHEMBL2176843	Kinase	0.0	2 / 0
Protein kinase C delta (by homology)	Prkcd	P28867	CHEMBL2560	Kinase	0.0	7 / 0
Heat shock protein HSP 90-alpha (by homology)	Hsp90aa1	P07901	CHEMBL4197	Other cytosolic protein	0.0	2 / 0
Protein kinase C theta type (by homology)	Prkcq	Q02111	CHEMBL1075295	Kinase	0.0	10 / 0
Mu opioid receptor (by homology)	Oprm1	P42866	CHEMBL2858	Family A G protein-coupled receptor	0.0	4 / 59
Kappa opioid receptor (by homology)	Oprk1	P33534	CHEMBL4329	Family A G protein-coupled receptor	0.0	2 / 22
Thymidylate synthase (by homology)	Tyms	P07607	CHEMBL3160	Transferase	0.0	10 / 0
High affinity cAMP-specific 3',5'-cyclic phosphodiesterase 7A (by homology)	Pde7a	P70453	CHEMBL2040702	Phosphodiesterase	0.0	8 / 0
Nitric oxide synthase, inducible (by homology)	Nos2	P29477	CHEMBL3464	Enzyme	0.0	6 / 0
Cannabinoid CB2 receptor (by homology)	Cnr2	P47936	CHEMBL5373	Family A G protein-coupled receptor	0.0	5 / 30
Tyrosine-protein kinase ABL (by homology)	Abl1	P00520	CHEMBL3099	Kinase	0.0	1 / 0
Vascular endothelial growth factor receptor 2	Kdr	P35918	CHEMBL3337	Kinase	0.0	2 / 0
Nuclear receptor ROR-gamma (by homology)	Rorc	P51450	CHEMBL1293231	Nuclear receptor	0.0	0 / 1
Peripheral-type benzodiazepine receptor (by homology)	Tspo	P50637	CHEMBL2149	Membrane receptor	0.0	6 / 0
G-protein coupled bile acid receptor 1	Gpbar1	Q80SS6	CHEMBL1255150	Family A G protein-coupled receptor	0.0	2 / 0
Serotonin 4 (5-HT4) receptor (by homology)	Htr4	P97288	CHEMBL2183	Family A G protein-coupled receptor	0.0	4 / 0
TGF-beta receptor type-1 (by	Tgfbr1	Q64729	CHEMBL2021750	Kinase	0.0	1 / 0

Target	Common name	Uniprot ID	ChEMBL ID	Target Class	Probability*	Known actives (3D/2D)
homology)						
Vascular endothelial growth factor receptor 1 (by homology)	Flt1	P35969	CHEMBL3516	Kinase	0.0	4 / 0
RAF proto-oncogene serine/threonine-protein kinase (by homology)	Raf1	Q99N57	CHEMBL3804748	Kinase	0.0	2 / 0
Urotensin-2 receptor (by homology)	Uts2r	Q8VIH9	CHEMBL2346494	Family A G protein-coupled receptor	0.0	1 / 0
Methionine aminopeptidase 2 (by homology)	Metap2	O08663	CHEMBL1075272	Protease	0.0	4 / 0
Tyrosine-protein kinase Lyn (by homology)	Lyn	P25911	CHEMBL2258	Kinase	0.0	1 / 0
Beta-secretase 1 (by homology)	Bace1	P56818	CHEMBL4593	Protease	0.0	5 / 0
Trace amine-associated receptor 1	Taar1	Q923Y8	CHEMBL4908	Family A G protein-coupled receptor	0.0	47 / 5
Histamine H1 receptor (by homology)	Hrh1	P70174	CHEMBL4322	Family A G protein-coupled receptor	0.0	4 / 0
Bombesin receptor subtype-3 (by homology)	Brs3	O54798	CHEMBL1075140	Family A G protein-coupled receptor	0.0	1 / 0
Estradiol 17-beta-dehydrogenase 2 (by homology)	Hsd17b2	P51658	CHEMBL1914270	Enzyme	0.0	4 / 14
HMG-CoA reductase (by homology)	Hmgcr	Q01237	CHEMBL2764	Oxidoreductase	0.0	0 / 1
Prostanoid EP1 receptor (by homology)	Ptger1	P35375	CHEMBL2181	Family A G protein-coupled receptor	0.0	2 / 0
Ribosomal protein S6 kinase alpha-3 (by homology)	Rps6ka3	P18654	CHEMBL3297641	Enzyme	0.0	1 / 0
Matrix metalloproteinase 9 (by homology)	Mmp9	P41245	CHEMBL2214	Protease	0.0	1 / 0
Matrix metalloproteinase-2 (by homology)	Mmp2	P33434	CHEMBL3095	Protease	0.0	1 / 0
Collagenase 3 (by homology)	Mmp13	P33435	CHEMBL3638350	Hydrolase	0.0	1 / 0
Neuronal acetylcholine receptor protein alpha-4 subunit	Chrna4	O70174	CHEMBL4457	Ligand-gated ion channel	0.0	2 / 0
Amine oxidase, copper containing (by homology)	Aoc3	O70423	CHEMBL4727	Enzyme	0.0	0 / 2
P2X purinoceptor 7	P2rx7	Q9Z1M0	CHEMBL5183	Ligand-gated ion	0.0	1 / 0

Target	Common name	Uniprot ID	ChEMBL ID	Target Class	Probability*	Known actives (3D/2D)
				channel		
Adenosine A2a receptor (by homology)	Adora2a	Q60613	CHEMBL2115	Family A G protein-coupled receptor	0.0	2 / 0
Uridine phosphorylase 1	Upp1	P52624	CHEMBL3718	Enzyme	0.0	2 / 0
Glucagon receptor	Gcgr	Q61606	CHEMBL4773	Family B G protein-coupled receptor	0.0	1 / 0
MAP kinase ERK2 (by homology)	Mapk1	P63085	CHEMBL2207	Kinase	0.0	3 / 0