

**ORIGINAL RESEARCH ARTICLE**

# Target molecular-based neuroactivity screening of *Panax ginseng* through network pharmacology integrated molecular docking

## Supplementary File

**Table S1.** The retrieved protein targets of *Panax ginseng*.

ID	Protein targets
101	Potassium voltage-gated channel subfamily H member 2
103	Muscarinic acetylcholine receptor M1
1074	Urokinase-type plasminogen activator
1152	Glycogen phosphorylase and muscle form
1159	Interleukin-6
1167	Interstitial collagenase
1176	Mitogen-activated protein kinase 1
1198	Serum paraoxonase/arylesterase 1
1243	Cathepsin D
1253	Interferon gamma
1253	Interferon gamma
146	Androgen receptor
1540	Mitogen-activated protein kinase 14
1629	Transcription factor AP-1
1654	Interleukin-1 beta
1721	Glycogen synthase kinase-3 beta
1756	E-selectin
1771	Cell division control protein 2 homolog
1908	Vascular cell adhesion protein 1
193	Beta-1 adrenergic receptor
1939	Heat shock protein HSP 90
20	Prostaglandin G/H synthase 1
220	Sodium channel protein type 5 subunit alpha
2207	Rhodopsin
23	Dopamine D1 receptor
2358	Type IV phosphodiesterase
238	Peroxisome proliferator activated receptor gamma
239	Coagulation factor Xa
2404	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit and gamma isoform
2478	Beta-lactamase
251	Alcohol dehydrogenase 1A
273	Apoptosis regulator Bcl-2

*(Contd...)*

**Table S1. (Continued).**

ID	Protein targets
274	Muscarinic acetylcholine receptor M5
275	Arachidonate 5-lipoxygenase
28	Collagen alpha-1(I) chain
280	4-aminobutyrate aminotransferase and mitochondrial
290	Prostaglandin G/H synthase 2
291	Nitric-oxide synthase and endothelial
3060	Leukotriene A-4 hydrolase
318	Alpha-2A adrenergic receptor
320	5-hydroxytryptamine 1A receptor
341	5-hydroxytryptamine receptor 3A
357	Carbonic anhydrase II
36	Insulin receptor
369	Coagulation factor VII
378	Alpha-2C adrenergic receptor
3923	Cholinesterase
3939	Amine oxidase [flavin-containing] B
3941	Amine oxidase [flavin-containing] A
3947	Xanthine dehydrogenase/oxidase
407	Vascular endothelial growth factor receptor 2
4095	Neuronal acetylcholine receptor protein and alpha-7 chain
4131	Prostaglandin E2 receptor EP3 subtype
4200	Cytochrome P450 1A2
423	Gamma-aminobutyric-acid receptor alpha-2 subunit
444	Alcohol dehydrogenase 1B
450	Muscarinic acetylcholine receptor M4
4512	Cytochrome P450 3A4
459	Retinoic acid receptor RXR-alpha
467	Delta-type opioid receptor
467	Delta-type opioid receptor
474	Acetylcholinesterase
482	Glycine receptor alpha-1 chain
485	CGMP-inhibited 3',5'-cyclic phosphodiesterase A
502	5-hydroxytryptamine 2A receptor
51	Muscarinic acetylcholine receptor M3
517	Alcohol dehydrogenase 1C
523	Gamma-aminobutyric-acid receptor alpha-5 subunit
54	Thrombin
540	Sodium-dependent noradrenaline transporter
556	Alpha-1A adrenergic receptor
5788	Cellular tumor antigen p53
580	Gamma-aminobutyric-acid receptor alpha-3 subunit
586	Aspartate aminotransferase and cytoplasmic
614	Progesterone receptor

(Contd...)

**Table S1. (Continued).**

ID	Protein targets
617	Muscarinic acetylcholine receptor M2
6263	mRNA of PKA Catalytic Subunit C-alpha
629	Alpha-2B adrenergic receptor
6292	Mitogen-activated protein kinase 8
632	Alpha-1B adrenergic receptor
650	Aldo-keto reductase family 1 member C3
6500	Phospholipase A2
6521	Rhinovirus coat protein
687	mRNA of Protein-tyrosine phosphatase and non-receptor type 1
7	Nitric oxide synthase and inducible
707	72 kDa type IV collagenase
713	Sodium-dependent dopamine transporter
737	Mineralocorticoid receptor
76	Nitric-oxide synthase and brain
777	Tumor necrosis factor
780	Retinoic acid receptor RXR-gamma
789	Alpha-1D adrenergic receptor
813	Neuronal acetylcholine receptor subunit alpha-2
817	DNA topoisomerase II
822	Aldose reductase
824	Sodium-dependent serotonin transporter
847	Mu-type opioid receptor
872	Gamma-aminobutyric acid receptor subunit alpha-1
904	Glutathione S-transferase P
933	Proto-oncogene tyrosine-protein kinase SRC
952	Dipeptidyl peptidase IV