

**Supplementary Table 1.** List of receptors classified by system

Neuro	Immuno	Metabolic
5-HT1AR	CCR2	AndrogenR
5-HT1BR	CCR3	EGFR
5-HT1DR	CCR4	EstrogenR
5-HT1ER	CCR5	EstrogenR beta
5-HT1FR	CCR6	FGFR1
5-HT2AR	CCR7	FGFR 2
5-HT2BR	CCR8	FGFR 3
5-HT2CR	CCR9	FGFR 4
5-HT3AR	CXCR1	FGFRL1
5-HT3BR	CXCR2	GDNFR1
5-HT3CR	CXCR3	GDNFR2
5-HT3DR	CXCR4	gEstrogen
5-HT3ER	CXCR5	Glucocorticoid
5-HT4R	CXCR6	IRS1
5-HT5AR	C1qR	IRS2
5-HT6R	C1qR2	IRS4
A1	C5aR	Insulin receptor-related protein
A2a	ComplementR1	InsulinR
A2b	ComplementR2	LeptinR
A3	IFNR	Leptin receptor gene-related protein
CB1	IL1R beta	MCR1
CB2	IL6R subunit alpha	MCR3
CRHR1	ProstacyclinR	MCR4
CRHR2	ProstaglandinD2R	MCR5
Delta opioid	ProstaglandinD2R2	Mineralocorticoid receptor
GABA alpha-1	ProstaglandinE2REP1	Neuron-specific vesicular protein calcyon
GABA alpha-2	ProstaglandinE2REP2	Nocturnin
GABA alpha-3	ProstaglandinE2REP3	p75NTR
GABA alpha-4	ProstaglandinE2REP4	PDGFa
GABA alpha-5	ProstaglandinF2aR	PDGFb
GABA alpha-6	TGFbR1	Progesterone receptor
GABA beta-1	TGFbR2	TrkA
GABA beta-2	TLR1	TrkB
GABA beta-3	TLR2	TrkC
GABA delta	TLR3	VEGFR1
GABA epsilon	TLR4	VEGFR2
GABA gamma-1	TLR5	VEGFR3
GABA gamma-2	TNFR 10A	PTCH1
GABA gamma-3	TNFR 10B	PTCH2
GABA pi	TNFR 10C	PTCHD1
GABA rho-1	TNFR 10D	PTCHD4
GABA rho-2	TNFR 11A	
GABA rho-3	TNFR 11B	
GABA theta	TNFR 12A	
Gephyrin	TNFR 13B	
GLR alpha1	TNFR 13C	
GLR alpha 2	TNFR 14	
GLR alpha 3	TNFR 16	
GLR alpha 4	TNFR 17	
GLR beta	TNFR 18	
GlutamateR1 (GLIA1)	TNFR 19	
GlutamateR2 (GLIA2)	TNFR 19L	
GlutamateR3 (GLIA3)	TNFR 1A	
GlutamateR4 (GLIA4)	TNFR 1B	
GRIK1	TNFR 21	
GRIK2	TNFR 27	
GRIK3	TNFR 3	
GRIK4	TNFR 4	
GRIK5	TNFR 5	
GRIN1	TNFR 6	
GRIN2A	TNFR 8	
GRIN2B	TNFR 9	
GRIN2C		
GRIN2D		
GRIN3A		
GRIN3B		
HistamineR1		
HistamineR3		
Kappa opioid		
MelatoninR1a		
MelatoninR1b		
Mu opioid		
M1		
M2		
M3		
M4		
M5		
NeurokininR		
nACh alpha10		
nACh alpha 2		
nACh alpha 3		
nACh alpha 4		
nACh alpha 5		
nACh alpha 6		
nACh alpha 7		
nACh alpha 9		
nACh beta2		
nACh beta3		
nACh beta4		
FF 1		
FF 2		
NPYR1		
NPYR2		
NPYR4		
NPYR4 2		
NPYR5		
OrexinR1		
OrexinR2		
OxytocinR		
PSD95		
Putative NYPR6		
SigmaR1		
TAAR1		
TRPV1		
V1a		
V1b		
V2		
VGLUT1		
VGLUT2		
VGLUT3		
VIAAT		
VMAT1		
VMAT2		

5-HT, 5-hydroxytryptamine (serotonin) receptor; A, adenosine receptor; CB, cannabinoid receptor; CC, C-C chemokine receptor; CXC, C-X-C chemokine receptor; CRHR, corticotropin releasing hormone receptor; FF, Neuropeptide FF; FGFR, fibroblast growth factor receptor; GABA, gamma-aminobutyric acid receptor; GDNF, glial cell line derived neurotrophic factor; GPCR, G-protein coupled receptor; GRIK, glutamate receptor ionotropic kainate; IFNR, interferon receptor; IL, interleukin; IRS, insulin receptor substrate; nACh, nicotinic acetylcholine receptor; NPYR, neuropeptide Y receptor; PDGF, platelet-derived growth factor receptor; p75NTR, p75 neurotrophic receptor; PSD, postsynaptic density protein 95; PTCH, protein patched homolog; TAAR, trace amino acid receptor; TGFbR, transforming growth factor beta receptor; TLR, toll-like receptor; TNFR, tumor necrosis factor superfamily member; VEGFR, vascular endothelial growth factor receptor; VIAAT, vesicular inhibitory amino acid transporter; VMAT, vesicular monoamine transporter; VGLUT, vesicular glutamate transporter; V, vasopressin receptor