

**Suppl. Table 1.** Commonalities and differences in the receptor profiles of the three approved partial dopamine agonist antipsychotic drugs.

Site	Aripiprazole		Brexpiprazole		Cariprazine	
	$K_D/K_i$ (nM)	Action	$K_D/K_i$ (nM)	Action	$K_D/K_i$ (nM)	Action
SERT	98–1,080	Inhibitor	65% at 10 $\mu$ M	Inhibitor		
NET	2,090	Inhibitor	0% at 10 $\mu$ M	Inhibitor		
DAT	3,220	Inhibitor	90% at 10 $\mu$ M	Inhibitor		
5-HT <sub>1A</sub>	1.7–5.6	Partial agonist	0.12	Partial agonist	2.6	Partial agonist
5-HT <sub>1B</sub>	830	ND	32	ND		
5-HT <sub>1D</sub>	68	ND	0.47	Antagonist		
5-HT <sub>1E</sub>	8,000	ND	1.9	Antagonist		
5-HT <sub>2A</sub>	3.4–35	Antagonist	12–34	Antagonist	18.8	Antagonist
5-HT <sub>2B</sub>	0.11-0.36	Inverse agonist	140	ND	0.58	Antagonist
5-HT <sub>2C</sub>	15–180	Partial agonist	58	Antagonist	134	Inverse agonist
5-HT <sub>3</sub>	628	ND	3.7	Antagonist		
5-HT <sub>5A</sub>	1,240	ND	0.12	Partial agonist		
5-HT <sub>6</sub>	214–786	Antagonist	32	ND		
5-HT <sub>7</sub>	9.6–39	Antagonist	0.47	Antagonist	84.1	Antagonist
$\alpha_{1A}$	25.9	ND	3.8	Antagonist	155	Antagonist
$\alpha_{1B}$	34.4	ND	0.17	Antagonist		
$\alpha_{1D}$			2.6	Antagonist		
$\alpha_{2A}$	74.3	ND	15	Antagonist		
$\alpha_{2B}$	102	ND	17	Antagonist		
$\alpha_{2C}$	37.9	ND	0.59	Antagonist		
$\beta_1$	141	ND	59	Antagonist		
$\beta_2$	163	ND	67	Antagonist		
$\beta_3$			>10,000	ND		
D <sub>1</sub>	265–1,170	ND	160	ND		
D <sub>2</sub>	1.4	Partial agonist	0.35	Partial agonist		
D <sub>2L</sub>	0.74-1.2	Partial agonist	0.30	Partial agonist	0.49	Partial agonist
D <sub>2S</sub>	1.2	Partial agonist			0.69	Partial agonist
D <sub>3</sub>	0.8–9.7	Partial agonist	1.1	Partial agonist	0.085	Partial agonist
D <sub>4</sub>	44–514	Partial agonist	6.3	ND		
D <sub>5</sub>	95–2,590	ND	ND	ND		
H <sub>1</sub>	27.9–61	ND	19	Antagonist	23.2	Antagonist
H <sub>2</sub>	>10,000	ND	>10,000	ND		
H <sub>3</sub>	224	ND	>10,000	ND		
H <sub>4</sub>	>10,000	ND				
mACh			52% at 10 $\mu$ M	ND	>1,000	Antagonist
M <sub>1</sub>	6,780	ND	67% at 10 $\mu$ M	ND		
M <sub>2</sub>	3,510	ND	>10,000	ND		
M <sub>3</sub>	4,680	ND				
M <sub>4</sub>	1,520	ND				
M <sub>5</sub>	2,330	ND				
NMDA	4,001	Antagonist				
$\sigma$			96% at 10 $\mu$ M	ND		

**Note.** The higher the  $K_i$  values, the lower the binding affinity; % potency of receptor occupancy at 10 micromolar concentrations increases as values increase. Blank boxes, not tested. *Abbreviations.* D, dopamine receptors; DAT, dopamine transporter; H, histamine receptors;  $K_i$ , dissociation constant, inhibitory; M, muscarinic cholinergic receptors; NAT, noradrenaline transporter; ND, not determined; nM, nanomoles; NMDA, *N*-methyl-D-aspartate glutamate receptors; SERT, serotonin transporter; 5-HT, serotonin receptors;  $\alpha$ , alpha adrenoceptors;  $\beta$ , beta-adrenoceptors;  $\mu$ M, micromoles;  $\sigma$ , sigma chaperone intracellular receptors (1 and 2 subtypes). Based on Shapiro et al., 2003 [49] for aripiprazole; Maeda et al., 2014 [47,48] for brexpiprazole; Kiss et al., 2010 [50] and Herman et al., 2018 [51] for cariprazine.