

Table X. Other Genes

Gene Knockout/ Overexpression*	Background	Operant	2BC	CIE	DID	References
β -arrestin-1 (<i>Arrb1</i>)	B6		—			Bjork et al., 2008
β -arrestin-2 (<i>Arrb2</i>)	B6		↓ 9-15%			Bjork et al., 2008
Cocaine- and amphetamine-regulated transcript protein (<i>Cartpt</i>)	B6		↑			Li et al., 2013 [28]
Gap junction delta-2 protein, Connexin- 36 (<i>Gjd2</i>)	B6		↓ males/females		↓ (2 h, 20%)	Salinas et al., 2012
G1/S-specific cyclin-D2 (<i>Ccnd2</i>)	129X1/SvJ × B6 × BALB/cAnNCrI		— 2%, 4%			Jaholkowski et al., 2008
α -gustducin (<i>Gnat3</i>)	B6		↑ 8%, 16%			Blednov et al., 2006
Histamine H3 receptor (<i>Hrh3</i>)	B6		↓		↓ (2, 4 h)	Nuutinen et al., 2008
LIM domain only protein 3 (<i>Lmo3</i>)	B6		— males/females		↑ (2, 4 h; males/females)	Savarese et al., 2008
Metallothionein-1/2 (<i>Mt1</i> , <i>Mt2</i> double knockout)	B6		— (4 h)			Olney et al., 2014
Period circadian protein homolog 1, mPer1 (<i>Per1</i>)	129S7/SvEvBrd and 129S1/SvImJ		↑ males/females			Loney et al., 2006
Period circadian protein homolog 1, <i>Per1^{Brdm1}</i>	<i>Per1^{Brdm1}</i> B6-Tyr ^{c-Brd} × 129S7		— drink-o-meter			Dong et al., 2011
Period circadian protein homolog 2, mPer2 (<i>Per2</i>)	B6-Tyr ^{c-Brd} × 129SvEv ^{Brd}	—	↑ stress			Zghoul et al., 2007
Period circadian protein homolog 2, mPer2 (<i>Per2</i>)	B6		— ADE			Brager et al., 2011
Period circadian protein homolog 2, mPer2 (<i>Per2</i>)	B6		↑ drink-o-meter			Brager et al., 2011
Disks large homolog 4, PSD-95 (<i>Dlg4</i>)	B6		↑			Brager et al., 2011
Disks large homolog 4, PSD-95 (<i>Dlg4</i>)	B6		↓ males/females			Camp et al., 2011
Protein fosB (<i>Fosb</i>)	129Sv × BALB/c		↑ day 1, ADE			Korkosz et al., 2006
Protransforming growth factor α (<i>Tgfa</i>)*	CD1		— males/females			Korkosz et al., 2006
Ras-related protein Rab-3A (<i>Rab3a</i>)	B6		↑			Hilakivi-Clarke et al., 2006
Ras-specific guanine nucleotide- releasing factor 2 (<i>Rasgrf2</i>)	B6		— (23 h)			Kapfhamer et al., 2006
Ras-specific guanine nucleotide- releasing factor 2 (<i>Rasgrf2</i>)	B6		↓			Stacey et al., 2012
Regulator of G-protein signaling 6 (<i>Rgs6</i>)	B6 × 129/Sv		↓ males/females			Stewart et al., 2011
Taste receptor type 1 member 3 (<i>Tas1r3</i>)	B6		↓			Blednov et al., 2006
Taste receptor type 1 member 3 (<i>Tas1r3</i>)	B6		↓ males/females			Brasser et al., 2011
Trace amine-associated receptor 1 (<i>Taar1</i>)	B6 × 129S1/Sv		↑ females			Lynch et al., 2013
Protein unc-79 homolog (<i>Unc79</i>)	B6 and B6 × DBA/2J		↑			Specia et al., 2010
<u>Neurogranin (calmodulin-binding protein) (gene name)</u>	<u>C57BL/6J</u>		↑			<u>Reker et al., 2018</u>

<u>FK506-binding protein (glucocorticoid receptor binding protein) (<i>FKBP5</i>)</u>	<u>C57BL/6J</u>			<u>↑ consumption, males (9%, 12%, 15%)</u> <u>— preference, males (9%, 12%, 15%)</u> <u>— consumption, females (3-15%)</u> <u>— preference, females (3-15%)</u>		<u>Qiu et al., 2016 [3]</u>
<u>Peroxisome proliferator-activated receptor α (<i>Ppara</i>)</u>	<u>B6 129S4</u>			<u>— (15%, 24 h)</u> <u>— (10%, 24 h)</u>		<u>Blednov et al., 2016</u>
<u>Growth arrest and DNA damage-inducible, beta (<i>Gadd45b</i>)</u>	<u>C57</u>			<u>— (12%)</u>	<u>— (20%, 4 h)</u>	<u>Gavin et al., 2016</u>
<u>Relaxin-3 family peptide receptor 3 (<i>Rxfp3</i>)</u>	<u>C57BL/6N</u>			<u>↑ males (12%)</u> <u>— females (12%)</u>	<u>— males/females (1BC, 10%, 4 h)</u>	<u>Shirahase et al., 2016</u>
	<u>C57BL/6J</u>	<u>—</u>				<u>Walker et al., 2016</u>

—, ↓, ↑: no significant difference, decreased ethanol intake and/or preference, or increased ethanol intake and/or preference, respectively, in mutant vs. wildtype mice. Male mice were tested unless indicated otherwise. Ethanol intake in the two-bottle choice (2BC) tests was measured in 24-h sessions, unless otherwise indicated. DID, drinking in the dark; ADE, alcohol deprivation effect. Recommended mouse protein and gene (in italics) names are from Uniprot. B6 refers to C57BL/6J and mice.