

Immune-related genes

Gene Knockout	Background	2BC	DID	References
Cathepsin F (<i>Ctsf</i>)	B6 × 129/SvJ	↓ males — females		Blednov et al., 2011 [243]
Cathepsin S (<i>Ctss</i>)	B6	↓ males/females	— 2BC, males ↓ 1B, males ↓ 1B, 2BC; females	Blednov et al., 2011 [243]
C-C motif chemokine 2 (<i>Cc12</i>)	B6	— males ↓ females		Blednov et al., 2005 [101]
C-C motif chemokine 3 (<i>Cc13</i>)	B6	↓ males/females		Blednov et al., 2005 [101]
C-C chemokine receptor type 2 (<i>Ccr2</i>)	B6	↓ males/females		Blednov et al., 2005 [101]
C-C chemokine receptor type 5 (<i>Ccr5</i>)	B6	— males/females		Blednov et al., 2005 [101]
Apolipoprotein E (<i>ApoE</i>)	B6	— females		Bechtholt et al., 2004 [65]
Monocyte differentiation antigen CD14 (<i>Cd14</i>)	B6	↓ males/females	— 1B, 2BC; males — 1B; females ↓ 2BC; females	Blednov et al., 2011 [243]
	B6	↓ males/females (24 h)	— males/females (1BC DID, 20%, 2 h, 4 h)	Blednov et al., 2017 [352]
Interleukin 1 receptor antagonist (<i>Il1rn</i>)	B6 × 129/SvJ	↓ males/females (intermittent 2BC) ↓ males/females	— males/females (2BC DID, 20%, 2 h, 4 h) ↓ 1B, 2BC; males ↓ 1B, 2BC; females	Blednov et al., 2011 [243]
Interleukin-1 receptor type 1 (<i>Il1r1</i>)	B6	— (9-18%)	— (20% 1B, 2 and 4 h) — (20%, 2BC)	Blednov et al., 2015 [342]
Interleukin-1 receptor type 1 (<i>Il1r1</i>) + Tumor necrosis factor-1 receptor (<i>Tnfr-1</i>) double-knockout	B6 B6	↓ (24 h) ↓ (24 h)		Karlsson et al., 2016 [358] Karlsson et al., 2016 [358]
Interleukin-6 (<i>Il6</i>)	B6	↓ males/females	— 1B, 2BC; males — 1B, 2BC; females	Blednov et al., 2011 [243]
β-2-microglobulin (<i>B2m</i>)	B6	↓ males/females	— 1B, 2BC; males — 1B, 2BC; females	Blednov et al., 2011 [243]
B2 bradykinin receptor (<i>Bdkrb2</i>)	B6	—		Maul et al., 2005 [98]
β-2-microglobulin (<i>B2M</i>) <assoc. with MHC class 1 mol.>	B6	↓ ↓ (limited-access)	— (2 h one bottle) (male) — (4 h one bottle) (male) — (2 h two bottle) (male) — (4 h two bottle) (male) ↓ (2 h two bottle) (female) ↓ (4 h two bottle) (female)	Blednov et al., 2011 [243]
Toll-like receptor 2 (<i>Tlr2</i>)	B6	↓ males — males/females (intermittent 2BC)	↓ females (1B DID, 20%, 2 h, 4 h) ↓ males/females (2B DID, 20%, 2 h, 4 h)	Blednov et al., 2017 [352]
Toll-like receptor 3 (<i>Tlr3</i>)	Balb/c B6	↑ (24 h) ↓ males — females	— (20%, one bottle, 2 h, 4 h)	Jang et al., 2016 [337] Blednov et al., 2021 [377]
Toll-like receptor 4 (<i>Tlr4</i>)	B6	— males/females — males/females (intermittent 2BC)	— males/females (1B DID, 20%, 2 h, 4 h) — males/females (2B DID, 20%, 2 h, 4 h)	Blednov et al., 2017 [352]
	B6 B6	↓ females (males not tested) ↓ females (males not tested) <this result based on Fig 5, which can be interpreted as KO blocks increase in ethanol intake caused by adolescent exposure to ethanol>	↓ (1B DID, 10%) females (males not tested)	Montesinos et al., 2017 [359] Montesinos et al., 2016 [362]
TRAF family member-associated nuclear factor-κB activator (<i>Tank</i>)		↓ (sex not specified)		Muller et al., 2019 [379]

–, ↓, ↑: no significant difference, decreased ethanol intake and/or preference, or increased ethanol intake and/or preference, respectively, in knockout 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. Drinking in the dark (DID) session times were 2 and 4 h; 1B, one bottle. Recommended mouse protein and gene (in italics) names are from Uniprot. B6 refers to C57BL/6J mice.