**GABA**

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| **Gene Knockout** | **Background** | **Operant** | **2BC** | **DID** | **References** |
| GABA-A receptor α1 subunit (*Gabra1*) | not specified | ↓ (30-60 min)**a**  males/females |  |  | June et al., 2007 [145] |
|  | B6 × 129SvEv |  | ↓ females |  | Blednov et al., 2003 [55] |
| GABA-A receptor α2 subunit (*Gabra2*) | B6 × 129SvEv |  | — males  — females |  | Boehm et al., 2004 [113] |
| GABA-A receptor α5 subunit (*Gabra5*) | B6 × 129SvEv |  | ↓ males  — females |  | Boehm et al., 2004 [113] |
|  | B6 × 129SvEv | — (1 h; females) | — females |  | Stephens et al., 2005 [109] |
| GABA-A receptor β2 subunit (*Gabrb2*) | B6 × 129SvEv |  | — females |  | Blednov et al., 2003 [55] |
| GABA-A receptor δ subunit  (*Gabrd*) | B6 × 129/Sv/SvJ |  | ↓ males/females |  | Mihalek et al., 2001 [26] |
|  |  | — (15 min) |  |  | Shannon et al., 2004 |
| GABA-A receptor ρ1 subunit (*Gabrr1*) | B6 × 129S4 |  | ↓ males  — females  — intermittent;  males/females | — (2, 4 h; males/females) | Blednov et al., 2014 [288] |
| GABA transporter I | B6 |  | — |  | Cai et al., 2006 [128] |
| Glutamic acid decarboxylase 2 (*Gad2*)b | B6 and 129/SvJ |  | ↑ 129N2  — 129N1  — B6 | — 129N2 (2, 4 h, 1B)  — 129N2 (3 h, 2BC) | Blednov et al., 2010 [96] |
| Glyoxalase 1 (the substrate of Glo1, methylglyoxal, is a competitive GABAA receptor partial agonist) (*Glo1*) | B6 |  |  | ↓ | McMurray et al., 2015 [361] |

–, ↓, ↑: no significant difference, decreased ethanol intake and/or preference, or increased ethanol intake and/or preference, respectively, in knockout (or *Gabra1* knockin) mice *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 session times for the other tests are indicated in parentheses. **a**Following operant testing, the same mice underwent a one-bottle, 2-h limited access test, in which knockout mice also consumed less ethanol than wildtype. bThere were no differences between 129N2 and wildtype mice using a SHAC model. DID, drinking in the dark; 1B, one bottle. Recommended mouse protein and gene (in italics) names are from Uniprot. B6 refers to C57BL/6J mice.