Emergence of functional spinal delta opioid receptors after chronic ethanol exposure

Supplemental Information

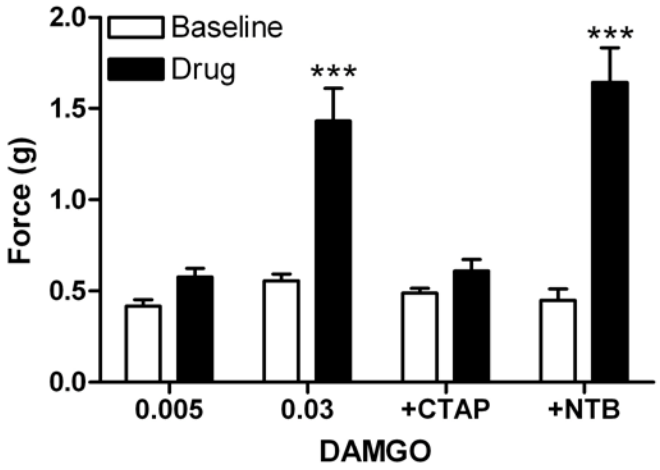

Figure S1. DAMGO reduces paw sensitivity to Von Frey filaments through interaction with MOR. WT mice (n = 9) were injected i.t. with 0.005 nmol DAMGO or 0.03 nmol DAMGO in the absence or presence of 0.2 nmol CTAP or 0.5 nmol NTB. Mechanical antinociception was measured 10 minutes after injection using Von Frey filaments. A baseline measurement was taken for each treatment prior to injection. *** $p < 0.001$. i.t., intrathecally; MOR, mu opioid receptor; NTB, naltriben mesylate; WT, wild-type.

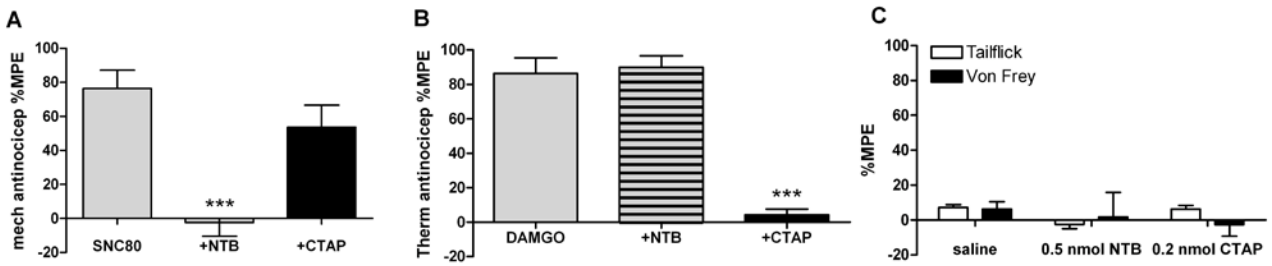

Figure S2. The DOR antagonist NTB and the MOR antagonist CTAP selectively block SNC80 and DAMGO induced antinociception, respectively without affecting nociception when administered alone. (A) Mechanical antinociception induced by i.t. administered SNC80 (10 nmol) is blocked by NTB (0.5 nmol) but not CTAP (0.2 nmol). **(B)** Thermal antinociception induced by i.t. administered DAMGO (0.03 nmol) is blocked by CTAP (0.2 nmol) but not NTB (0.5 nmol). **(C)** Neither saline, NTB (0.5 nmol) or CTAP (0.2 nmol) produce significant thermal or mechanical antinociception. n = 8-13, *** $p < 0.001$. DOR, delta opioid receptor; i.t., intrathecally; MPE, maximal possible effect; MOR, mu opioid receptor; NTB, naltriben mesylate.

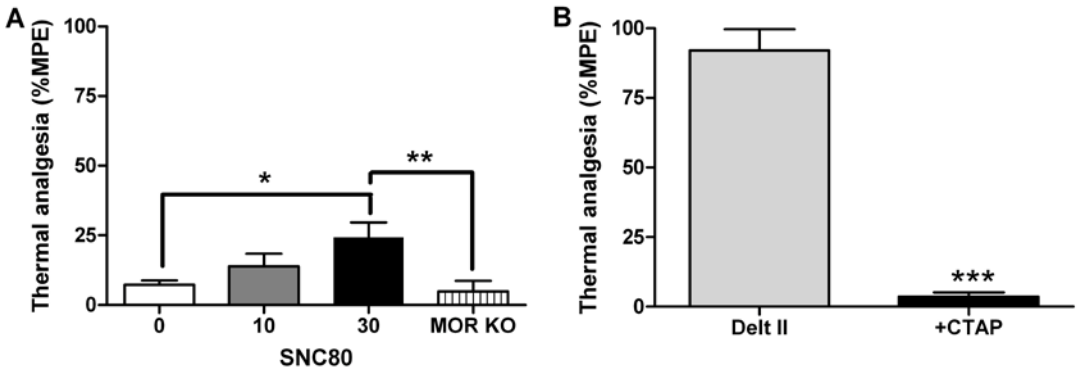

Figure S3. Thermal antinociception produced by DOR-selective agonist is mediated through interaction with MOR. (A) In WT mice (n = 10-13), a high enough dose of 30 nmol SNC80 administered i.t. produces thermal antinociception, which is abolished in MOR KO mice (n = 9). **(B)** The thermal antinociceptive effects of an i.t. administered dose of deltorphin II (4 nmol) in WT mice (n = 8-10) is blocked by co-administration of the MOR-selective antagonist CTAP (0.2 nmol). * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Delt II, deltorphin II; DOR, delta opioid receptor; i.t., intrathecally; KO, knockout; MPE, maximal possible effect; MOR, mu opioid receptor; NTB, naltriben mesylate; WT, wild-type.