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Supplementary Figures – Preliminary Dose Ranging Studies

Figure 1: Dose response curve for buprenorphine (10ml/kg, i.p.) in the warm water tail withdrawal assay in adult CD1 mice. All values are mean +/- SEM, n=6 per group. Antinociceptive effects are shown as % maximum possible effect (%MPE). Two-way repeated measures mixed model analysis revealed a significant interaction of Treatment * Time ($F_{(9,60)}$ =19.90, p< 0.001). Buprenorphine 1 mg/kg and 3 mg/kg treated mice showed significant antinociceptive effects compared to saline or buprenorphine 0.3 mg/kg treated groups (*** p<0.001) at 60 and 120 min post-administration. Buprenorphine 3mg/kg effects were sustained at 240 min post-administration (## p<0.01 compared to saline).

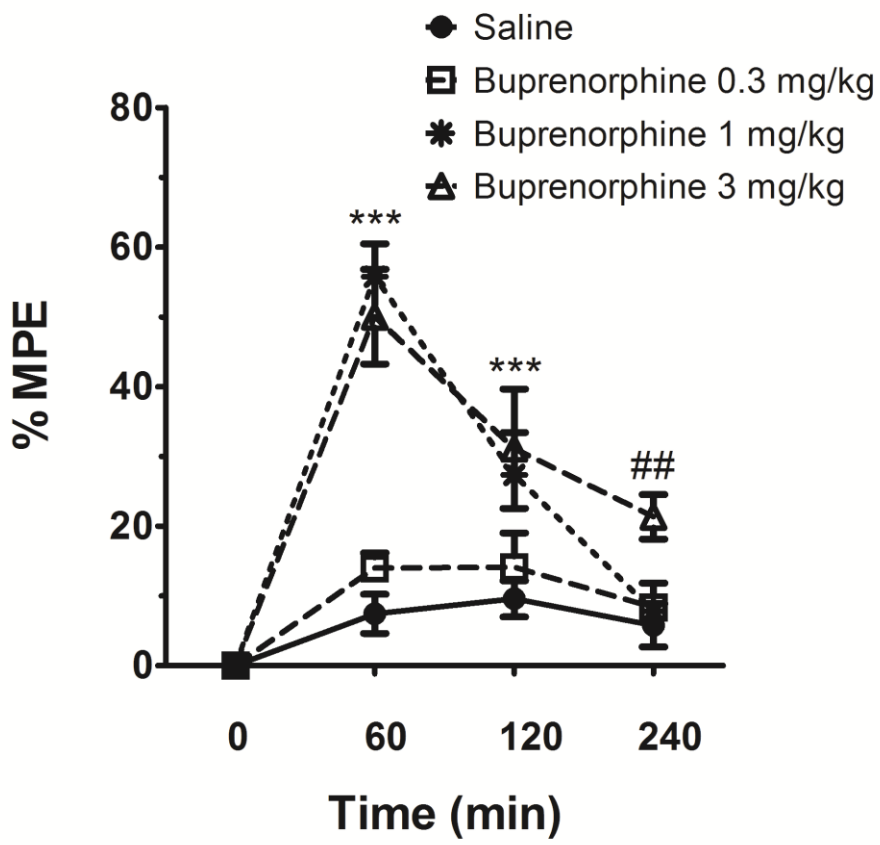

Figure 2: Locomotor effects of buprenorphine and naltrexone (10ml/kg, i.p.) in the open field in adult CD1 mice. All values are mean +/- SEM, n=6 per group. The whole distance travelled during a 10 min test is shown. Neither buprenorphine (0.3, 1, and 3 mg/kg) nor naltrexone (1 mg/kg) had any significant effects on total locomotion, compared to saline treated controls.