

Supplemental Figure 1. Effects of repeated vehicle, TRV130, and methadone treatment on fentanylvs.-food choice in male rats assessed 8 h after overnight (6:00 PM-6:00 AM) extended access fentanyl self-administration sessions. (A, D) Opioid-withdrawal effects on percent fentanyl choice. (B, E) Percentage of completed ratio requirements on the fentanyl-associated lever. (A, B, D, E) X-axis: Intravenous unit fentanyl dose in micrograms per kilogram per injection. (C, F) Number of choices completed per session. Points and bars represent mean ± SEM. Data of week 1 and week 2 show averaged results of the choice sessions within that particular week. * Denotes significant difference relative to vehicle; \$ Denotes significant difference from TRV130, p< 0.05. See Supplemental Materials Table 1 for statistics relevant to each panel. Vehicle: n=8; TRV130: n=7; Methadone: n=5.

3.2

10

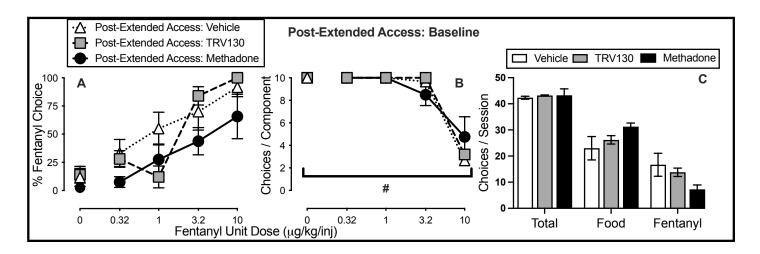
Total

Food

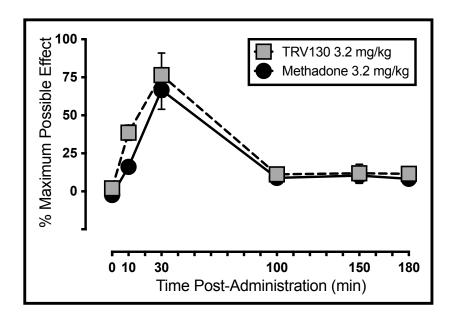
Fentanyl

3.2 10 0 Fentanyl Unit Dose (µg/kg/inj)

0.32



Supplemental Figure 2. Comparison of fentanyl-vs.-food choice in post-opioid-dependent male rats following a one week "washout" period. (A) Percent fentanyl choice. (B) Percentage of completed ratio requirements on the fentanyl-associated lever. (A and B) x-axis: Intravenous unit fentanyl dose in micrograms per kilogram per injection. (C) Number of choices completed per session. Points and bars represent mean ± SEM. Vehicle, TRV130, and methadone data show data collected Friday of the "washout" week. # Denotes a significant treatment history × fentanyl unit dose interaction, p< 0.05. See Supplemental Materials Table 1 for statistics relevant to each panel. Vehicle: n=8; TRV130: n=7; Methadone: n=5.



Supplemental Figure 3. Antinociceptive timecourse of 3.2 mg/kg TRV130 and 3.2 mg/kg methadone administered subcutaneously in a warm-water tail withdrawal procedure (50°C). y-axis: Percent maximum possible effect (20s). x-axis: Time (minutes) post drug administration. Raw baseline tailwithdrawal latencies mean (±SEM): TRV130: 3.4 s (±0.4); Methadone: 3.7 s (±0.5). Points represent mean ±SEM. N=5 male rats.