



Figure 4 - Supplement 2: Regrouping after adolescence social isolation restore PVN and VTA excitability

(A) Experimental design: WT mice were isolated between P28 and P35 and regrouped until P60 or always kept in group. CTB-488 was injected at p45-50. (B) Left: experimental paradigm, PVN neurons were subjected at multiple depolarizing current steps. Right: example traces from 250pA depolarizing current injection. (C) Number of action potentials (APs) across increasing depolarizing current steps (Two-way RM ANOVA, current step x house condition $F(6, 132) = 0.2047$, $p = 0.9748$, current step main effect $F(2.764, 60.82) = 39.55$, $p < 0.001$, House condition main effect $F(1, 22) = 0.006080$, $p = 0.9386$). (D) Resting membrane potential of recorded cells (Unpaired samples t-test, $t(22) = 0.4549$, $p = 0.6536$. Grouped $n = 11$, Isolated $n = 13$ from 3 mice each group). (E) Left: experimental paradigm, VTA pDA neurons were subjected at multiple depolarizing current steps. Right: example traces from 250pA depolarizing current injection. (F) Number of action potentials (APs) across increasing depolarizing current steps (Two-way RM ANOVA, Current step x House condition $F(6, 126) = 0.1048$, $p = 0.9957$, Current step main effect $F(1.983, 41.64) = 50.14$, $p < 0.001$, House condition main effect $F(1, 21) = 0.05862$, $p = 0.8110$). (G) Resting membrane potential of recorded cells (Unpaired samples t-test, $t(21) = 3.538$, $p = 0.0019$. Grouped $n = 11$, Isolated $n = 12$ from 3 mice each group). Data are represented as mean \pm SEM