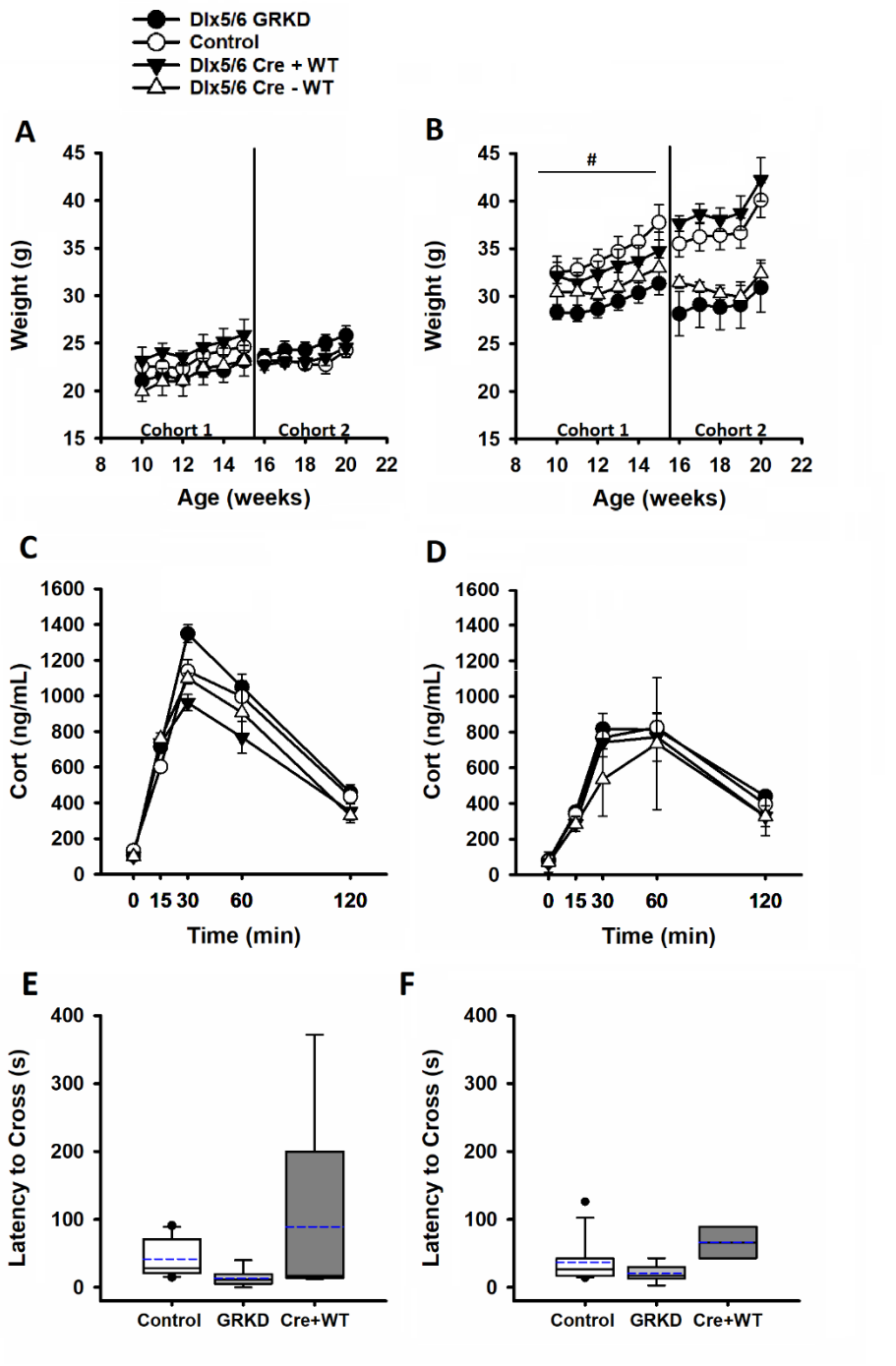
Figure S1. Weights, corticosterone and passive avoidance for all genotypes showing no effect of Cre Recombinase. A) Females in cohort 1 showed no interaction with week an genotype [F(18,138) = 1.610 ; p = 0.065] or genotype alone [F(3,138) = 2.405; p = 0.093]. Cohort 1 females only showed an effect of week [F(6,138)=18.799; p<0.001]. Similarly, females in cohort 2 showed an effect of week [F(4,64); p<0.001], but no effect of genotype [F(2,64) = 0.984; p=0.395] and no interaction effect [F(8,64)=1.572; p = 0.151]. Cohort 1 Dlx5/6 GRKD n=10; Control n=10; Dlx5/6Cre+ WT n=3; Dlx5/6Cre-WT n=4. Cohort 2 Dlx5/6 GRKD n=7; Control n=9; Dlx5/6Cre+ WT n=5; There were no Dlx5/6 Cre-WT in cohort 2. B) Males in cohort 1 showed an interaction between week and genotype [F(15,105) = 1.833; p = 0.039] and an effect of week [F(5,105) = 39.699 ; p<0.001]. B) Males in cohort 1 did not show an effect of genotype [F(3,105) = 2.717; p=0.071]. Cohort 2 males did not show a genotype by week interaction [F(12,100) = 1.309; p=0.225], but did show an effect of time [F(4,100) = 18.634; p <0.001] and genotype [F(3,100) = 2.986, p = 0.50]. # = interaction effect p <.05. Fisher's LCD test revealed a significant difference between only Dlx5/6 GRKD and Controls at each week. C) Corticosterone after acute restraint (cohorts pooled together). Females only showed an effect of time when all genotypes were analyzed: genotype [F(3,219) = 1.847 ; p = 0.154], time [F(4,219)=132.071; p <0.001], Genotype x time [F(12,219) = 1.243 ; p =0.258]. Dlx5/6 GRKD n=17, Control n= 18, Dlx5/6 Cre-WT n=4, Dlx5/6 Cre+WT n=3. D) Males also only showed an effect of time when all genotypes were analyzed genotype [F(3,272) = 2.488 ; p=0.071, Time F(4,272) = 60.971; p<0.001; genotype x time F(12,272) = 0.381; p=0.969]. * Fishers LCD – 30 min Dlx5/6 GRKD vs. Dlx5/6 Cre- WT p=0.005, Control vs Dlx5/6 Cre- Wt p=0.036. Dlx5/6 GRKD n=22, control n=24, Dlx5/6 Cre+WT n=5, Dlx5/6 Cre-WT n=5. E) Day 2 of Passive avoidance showing no effect of genotype. Females had a significant interaction effect [H=7.389; p = 0.025] with Dunn's posthoc showing only Dlx5/6 GRKD and Controls being different [p= 0.020] and no differences with Cre+ Wt animals. Dlx5/6 GRKD n= 6; Control n=10; Dlx5/6 Cre+WT n=5. E) F) Males showed on differences in day 2 of passive avoidance [H=5.584; p = 0.061].



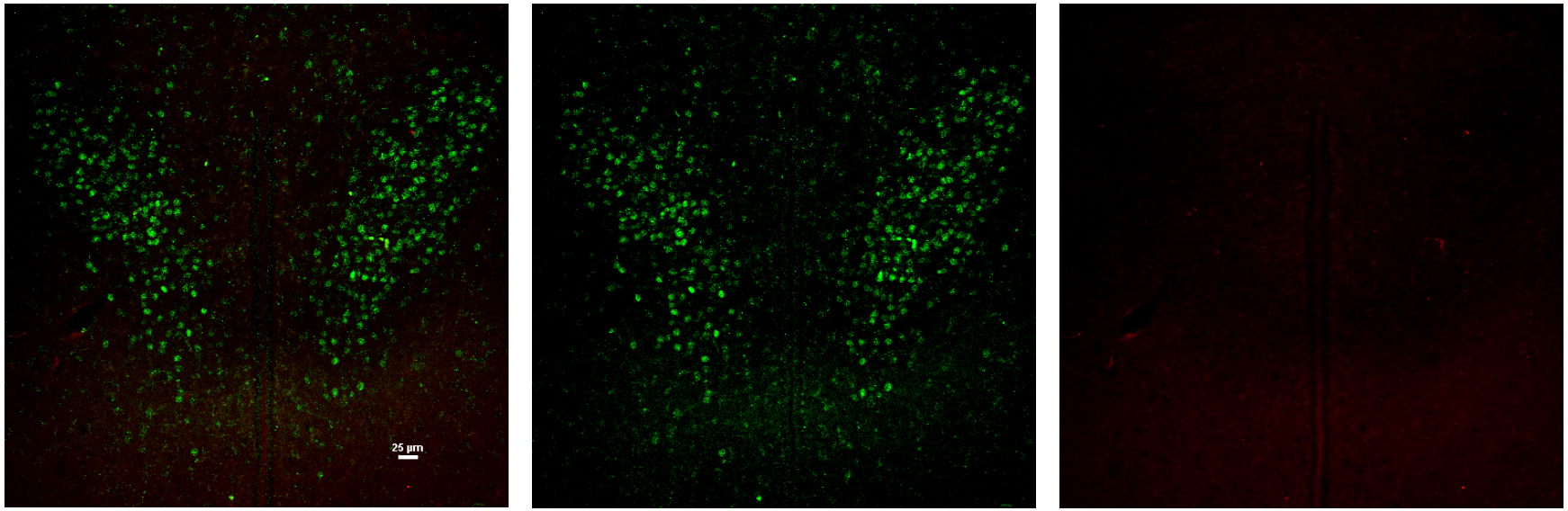


Figure S2. Representative image showing no Cre staining and robust GR expression in the paraventricular nucleus of the hypothalamus (PVN) (red=Cre, Green=GR).

Figure S3. Dlx5/6 GRKD organ weight does not differ from controls A) Female hearts [t(17) = 0.451; p = 0.658] B) Male hearts [t(17) = -1.727; p = 0.102] C) female Thymus [t(14) = .466 ; p = 0.466] D) male thymus [t(18) = 0.604; p = 0.553] E) female adrenals (averaged) [t(17)= -0.998 ; p = 0.332] F) male adrenals (averaged) t(17) = -0.685 ; p = 0.502].