

SUPPLEMENTARY MATERIALS

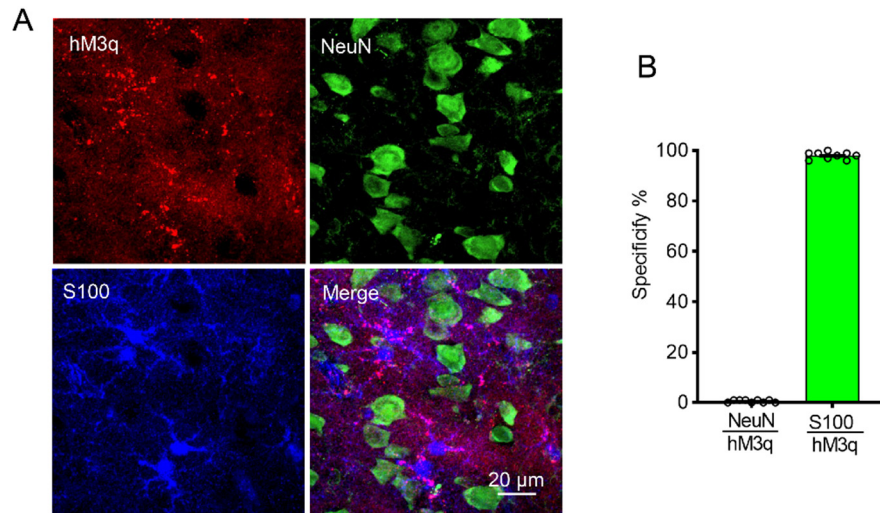


Figure S1. hM3q expression has high specificity. Related to Figure 1.

(A) hM3q (red) is co-expressed with S100 (blue) but not NeuN (green), scale bar 20 μ m.

(B) Quantification of the percentage of co-expression level of NeuN/hM3q and S100/hM3q.

(n = 3 of each group, 9 slices per group, data are presented as mean \pm SEM.)

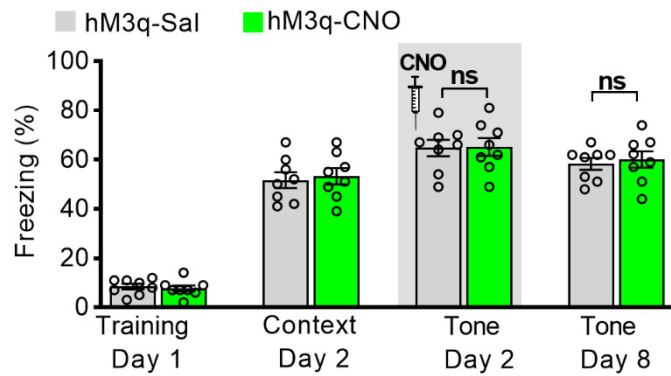


Figure S2. Astrocytic Gq activation in BLA does not have a direct effect on memory recall. Related to Figure 1.

Chemogenetic activation of astrocyte Gq in BLA during day auditory cued test on day 2 did not affect the cue fear memory on day 2 ($p > 0.999$) and day 8 ($p > 0.999$) (Saline group $n = 8$, CNO group $n = 8$, ns stands for no significance, two-way ANOVA followed by Bonferroni's post hoc test, main effect of Sal/CNO: $F(1, 14) = 0.1453$, $P = 0.7088$). Data are presented as mean \pm SEM.

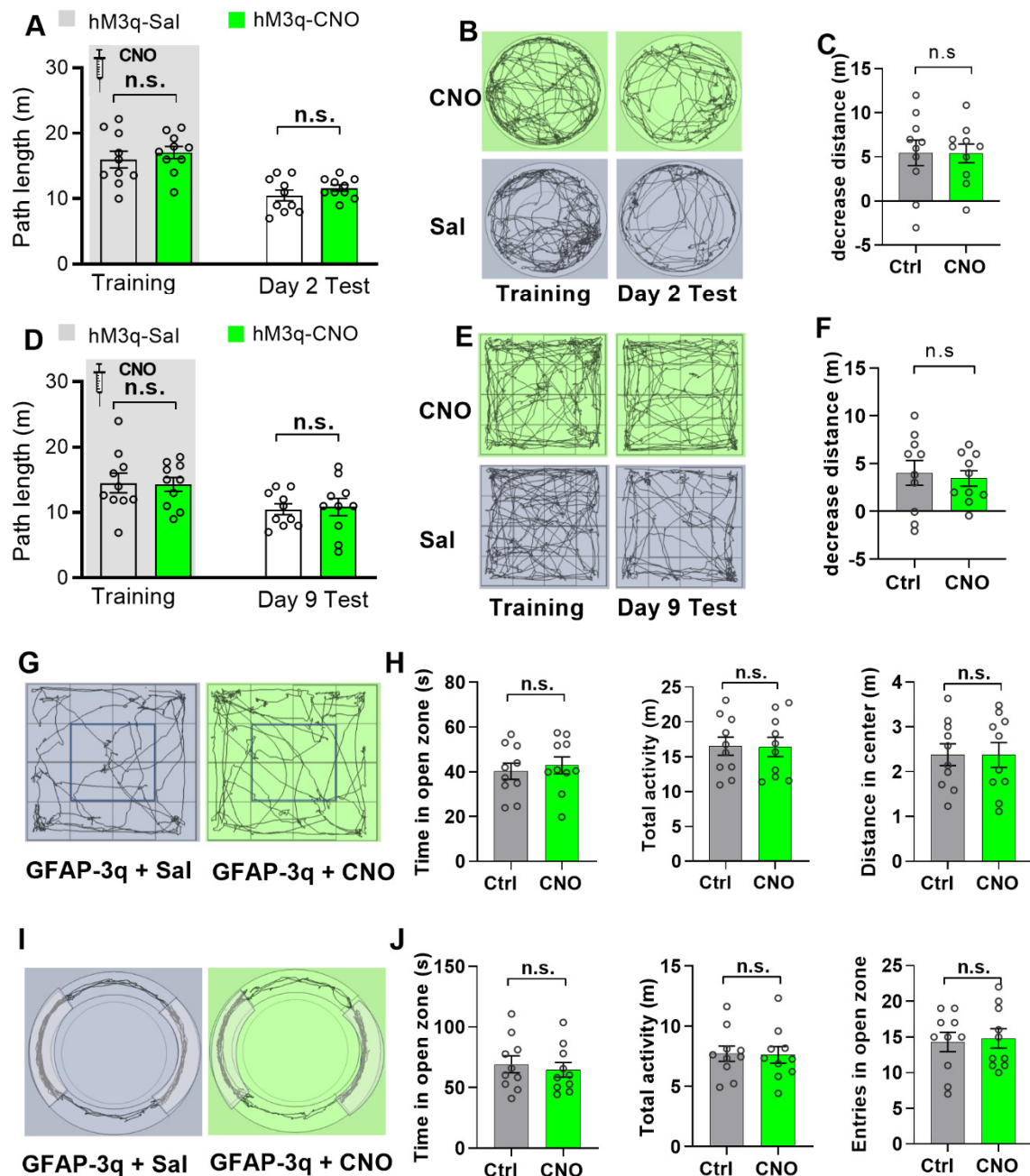


Figure S3. Astrocytic Gq activation in BLA did not affect non-aversive memory and did not induce anxiety-like behavior. Related to Figure 1.

(A–F) Astrocytic Gq activation did not affect the short-term (day 2 test) or long-term (day 9 test) association memory in the less-stress memory task.

(G,H) Chemogenetic astrocytic Gq activation did not affect the time in open zone (center zone), the total activity, or distance in center of OFT.

(I,J) Chemogenetic astrocytic Gq activation did not affect the time in open zone, the total activity, or entries in open zone in EZM (unpaired student t test, n = 10 in each group, data are presented as mean \pm SEM).