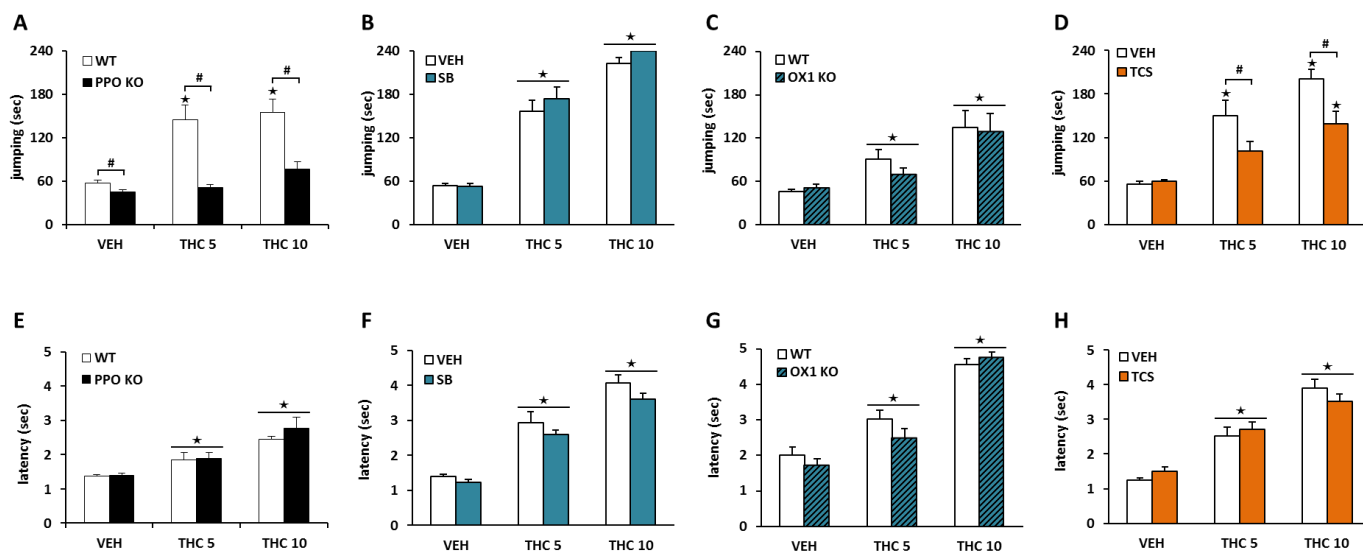


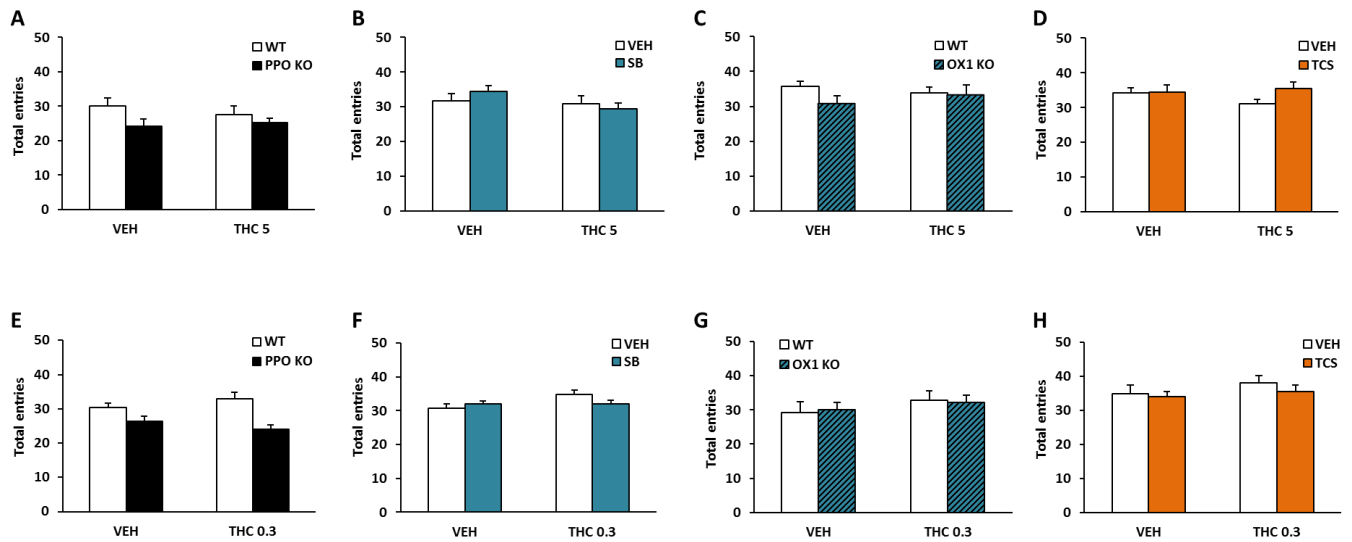
Supplementary Material

Figure S1



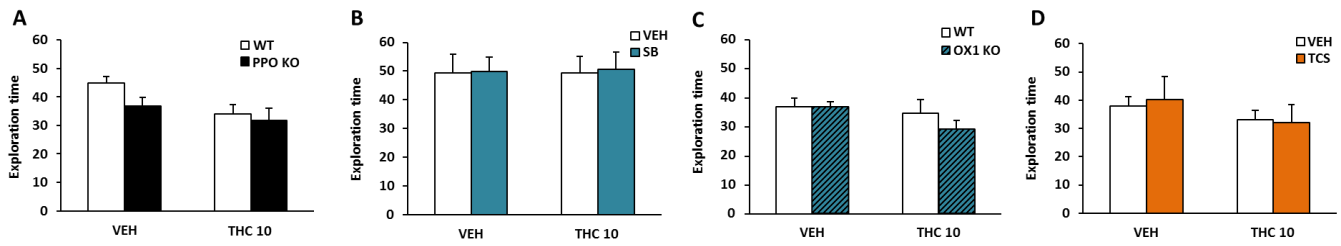
Nociceptive thresholds evaluated in the hot plate test (A, B, C, D) and the tail immersion test (E, F, G, H), expressed in seconds. The jumping response and the latency to tail-flick, respectively, were determined after the acute administration of THC (5 and 10 mg kg⁻¹) in PPO KO mice (A, E), in OX1 KO mice (C, G), and in mice pre-treated with the OX1 antagonist SB-334867 (5 mg kg⁻¹) (B, F) or the OX2 antagonist TCS-OX-229 (10 mg kg⁻¹) (D, H). Data are expressed as mean ± SEM (n = 9-14 mice for each group). PPO, prepro-orexin; VEH, vehicle; SB, SB-334867; TCS, TCS-OX-229. ★p < 0.01 when comparing with control group; #p < 0.05 comparison between genotypes or with VEH pre-treated mice (Newman–Keuls test).

Figure S2



No significant differences in exploration parameters were observed between groups during the evaluation of anxiety-like behaviour in the elevated plus maze. Anxiogenic-like effects (A, B, C, D) were evaluated 5 hours after the acute injection of THC at 5 mg kg⁻¹, whereas anxiolytic-like effects (E, F, G, H) were measured 30 minutes after the administration of THC at 0.3 mg kg⁻¹. The total number of entries was recorded for 5 minutes in PPO KO mice (A, E), OX1 KO mice (C, G), and in mice pre-treated with the OX1 antagonist SB-334867 (5 mg kg⁻¹) (B, F) or the OX2 antagonist TCS-OX2-29 (10 mg kg⁻¹) (D, H). Data are expressed as mean±s.e.m. (n=7-12 mice for each group in anxiogenic-like approach, n=8-18 in anxiolytic-like approach). PPO, prepro-orexin; VEH, vehicle; SB, SB-334867; TCS, TCS-OX2-29.

Figure S3



No significant differences in the total exploration time was observed between groups during the evaluation of amnesic-like behaviour. Amnesic-like effects (A, B, C, D) were evaluated in the novel object recognition task. THC (10 mg kg⁻¹) was administered 20 minutes after the training session to PPO KO mice (A), OX1 KO mice (C), and to mice receiving the OX1 antagonist SB-334867 (5 mg kg⁻¹) (B) or the OX2 antagonist TCS-OX2-29 (10 mg kg⁻¹) (D) immediately after the training trial. Data are expressed as mean±s.e.m. (n=7-9 mice for each group). PPO, prepro-orexin; VEH, vehicle; SB, SB-334867; TCS, TCS-OX2-29.