

Figure S2

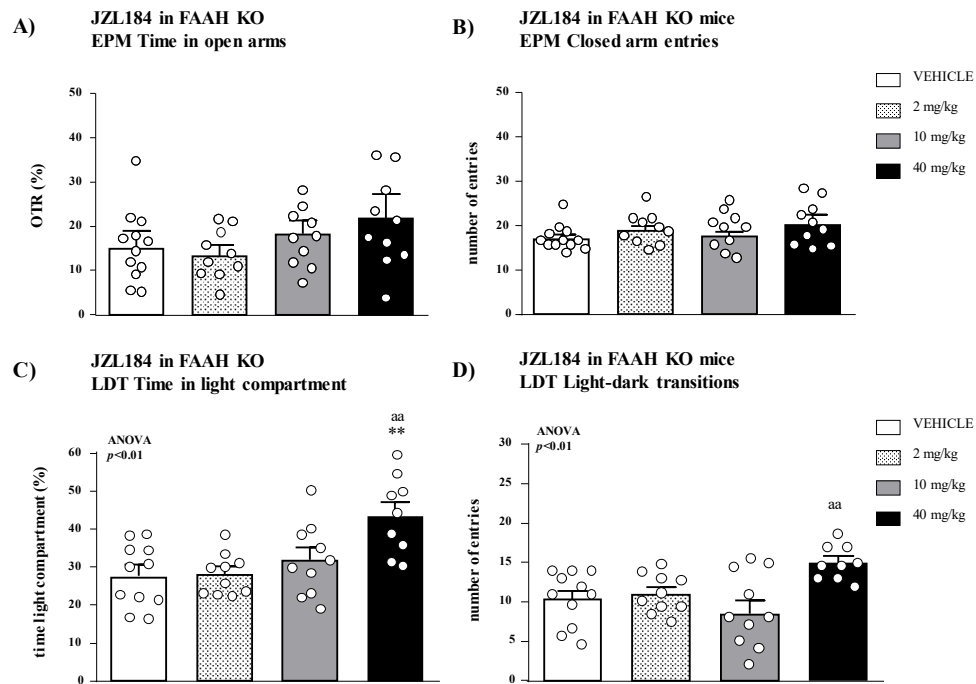


Figure S2. Effects of JZL184 on anxiety-like behavior and locomotor activity in the EPM and LDT in FAAH KO mice. Effects of the selective MAGL inhibitor JZL184 (2, 10 and 40mg/kg, i.p.) on the time spent in open arms (A) and the number of entries in the closed arms (B) in FAAH KO mice ($n=10-12$ per group). Effects of the selective MAGL inhibitor JZL184 (2, 10 and 40mg/kg, i.p.) on the time spent in the light compartment (C) and the number of transitions between light and dark compartments (D) in FAAH KO mice ($n=9-11$ per group). Bars are mean and SEM. Symbols in the bars denote significant differences in the *post hoc* test after one-way ANOVA: (***) $p < 0.01$ denotes significant differences vs. the vehicle group; (aa) $p < 0.01$ denotes significant differences vs. the low-dose group.

Description results

The EPM and LDT were used to assess the anxiety-like effects and locomotor activity of treatments with JZL184 in FAAH KO mice. The ratio of time spent in open arms (OTR)

and the number of entries in the closed arms were controlled in the EPM, while the time spent in the light compartment and the number of transitions between the light and dark compartments were controlled in the LDT. **(A)** One-way ANOVA revealed no significant main effect of treatment with JZL184 on the OTR in FAAH KO mice; **(B)** One-way ANOVA revealed no significant main effect of treatment with JZL184 on the closed arm entries in FAAH KO mice; **(C)** One-way ANOVA revealed a significant main effect of treatment with JZL184 on the time in light compartment ($F_{(3,36)}=5.670;p=0.003$) in FAAH KO mice. The *post hoc* test showed that mice treated with 40mg/kg of JZL184 significantly increased the time in light compartment compared with the vehicle group ($p<0.01$), which indicates an anxiolytic-like effect at 40mg/kg; **(D)** One-way ANOVA revealed a significant main effect of treatment with JZL184 on the light-dark transitions ($F_{(3,36)}=4.794;p=0.007$) in FAAH KO mice. The *post hoc* test showed no differences compared with the vehicle group.