Figure S3

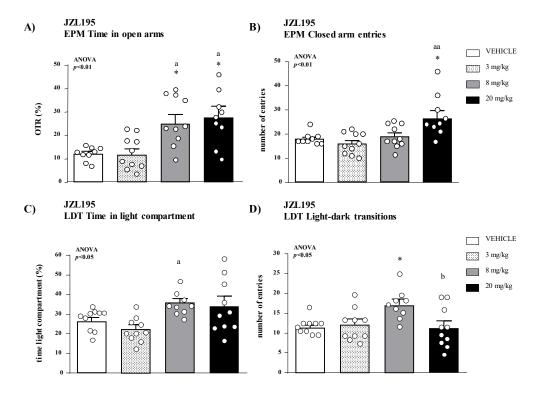


Figure S3. Effects of JZL195 on anxiety-like behavior and locomotor activity in the EPM and LDT in WT mice. Effects of the dual FAAH/MAGL inhibitor JZL195 (3, 8 and 20mg/kg, i.p.) on the time spent in open arms (A) and the number of entries in the closed arms (B) in WT mice (n=9-10 per group). Effects of the dual FAAH/MAGL inhibitor JZL195 (3, 8 and 20mg/kg, i.p.) on the time spent in the light compartment (C) and the number of transitions between light and dark compartments (D) in WT mice (n=10-9 per group). Bars are mean and SEM. Symbols in the bars denote significant differences in the *post hoc* test after one-way ANOVA: (\*) p<0.05 denotes significant differences vs. the vehicle group; (a) p<0.05 and (aa) p<0.01 denote significant differences vs. the low-dose group. (b) p<0.05 denotes significant differences vs. the intermediate-dose group.

## **Description results**

The EPM and LDT were used to assess the anxiety-like effects and locomotor activity of treatments with JZL195 in WT 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 a significant main effect of treatment with JZL195 on the OTR ( $F_{(3,34)}=5.767; p=0.003$ ) in WT mice. The post hoc test showed that mice treated with 8 and 20mg/kg of JZL195 significantly increased the OTR compared with the vehicle group (p < 0.05), which indicates an anxiolytic-like effect at 8 and 20mg/kg; (B) One-way ANOVA revealed a significant main effect of treatment with JZL195 on the closed arms entries  $(F_{(3,34)}=5.081; p=0.005)$ in WT mice. The post hoc test showed a significant increase in the closed arm entries in WT mice treated with 20mg/kg compared with the vehicle group; (C) One-way ANOVA revealed a significant main effect of treatment with JZL195 on the time in light compartment  $(F_{(3,35)}=4.019; p=0.015)$  in WT mice. The post hoc test showed no differences compared with the vehicle group; (D) One-way ANOVA revealed a significant main effect of treatment with JZL195 on the light-dark transitions  $(F_{(3,35)}=3.682; p=0.021)$  in WT mice. The post hoc test showed that mice treated with 8mg/kg of JZL195 significantly increased the number of light-dark transitions compared with the vehicle group (p < 0.05).