Supplementary Figures

Involvement of cannabinoid type 1 receptor (CB1R) in fasting-induced analgesia

Authors

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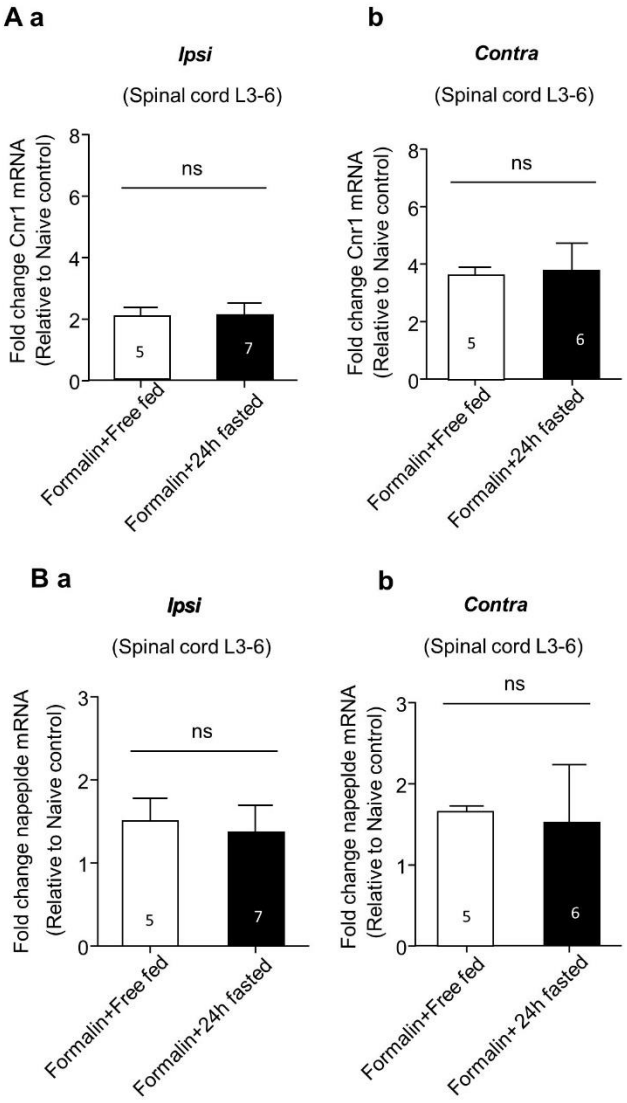
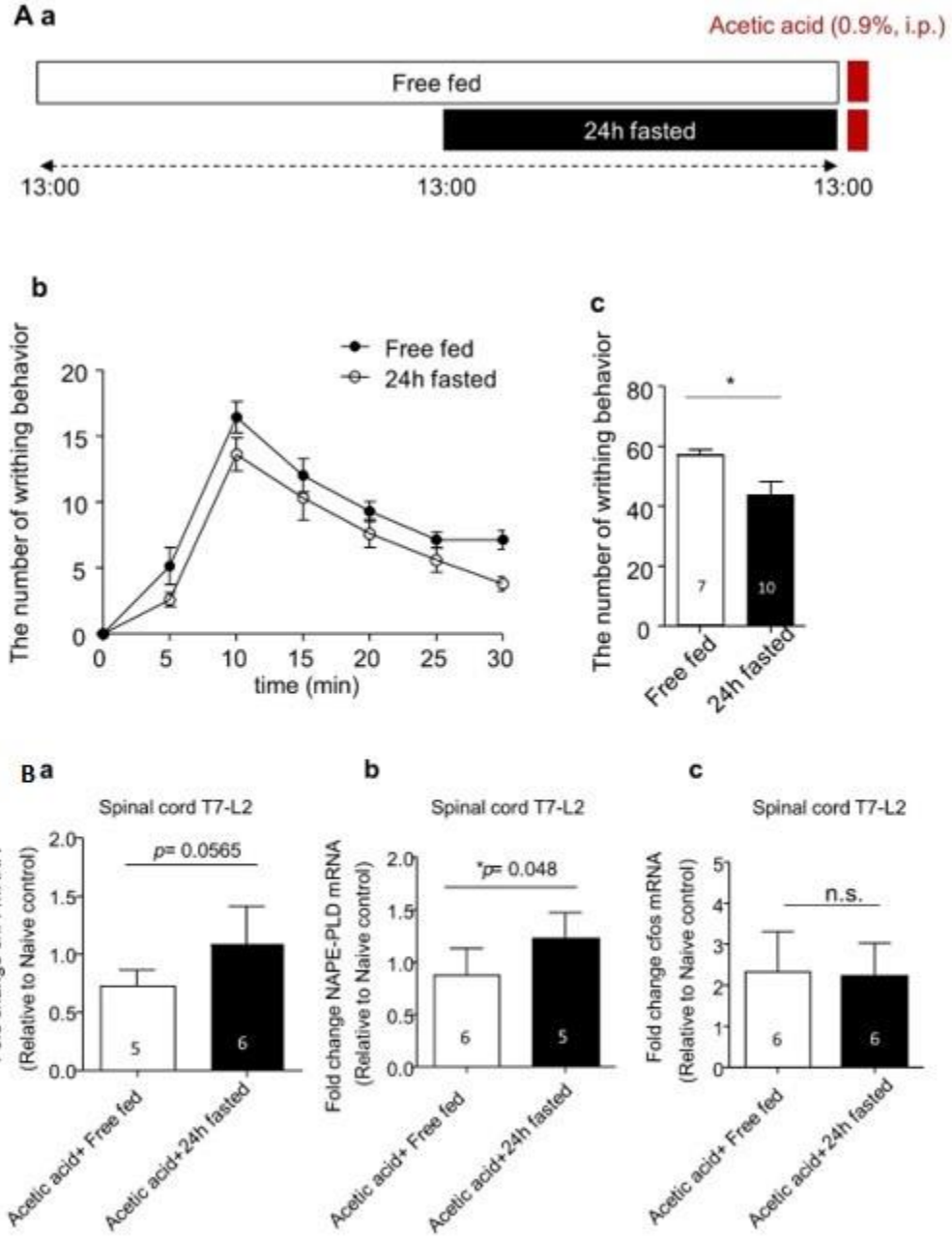


Supplementary Figure 1

Supplementary Figure 1. The effect of fasting on endocannabinoid system in spinal cord of formalin-induced acute inflammatory pain model

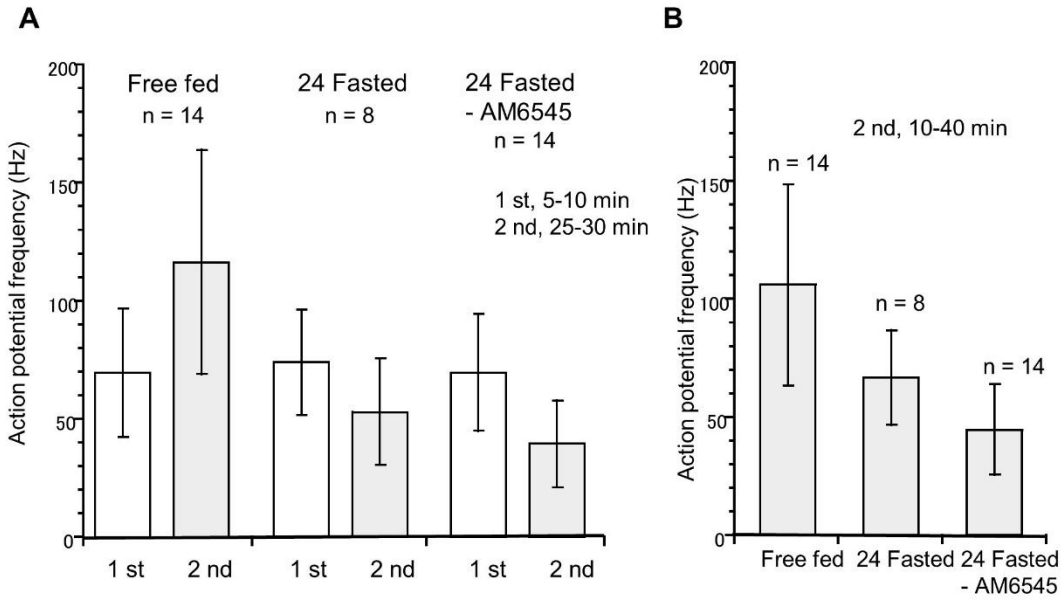
(A) The mRNA expression of CB1R (cnr1) in lumbar spinal cord. **(B)** The mRNA expression of the synthesizing enzyme N-acyl phosphatidylethanolamine phospholipase D (NAPE-PLD) in lumbar spinal cord. (**(A), (B)** unpaired t-test)



Supplementary Figure 2

Supplementary Figure 2. The effect of 24h fasting on acetic acid-induced acute visceral pain model

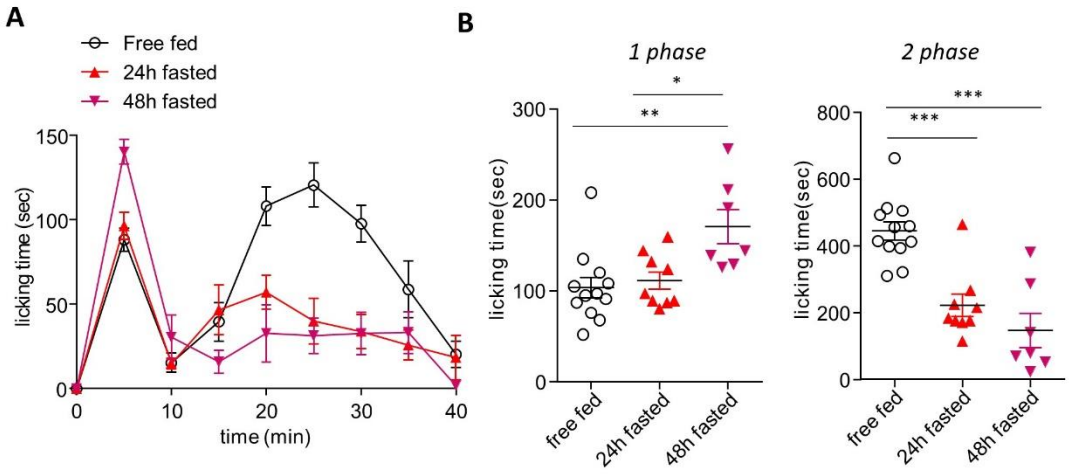
(A) Experimental design and schedule (a). Time course of spontaneous pain behavior following intraperitoneal injection of acetic acid (b). The number of writhing behavior was counted and analyzed. **(B)** The mRNA expression of CB1R (cnr1), the synthesizing enzyme N-acyl phosphatidylethanolamine phospholipase D (NAPE-PLD), and c-fos in lumbar spinal cord. *$p<0.05$ (**(A), (B)** unpaired t-test)



Supplementary Figure 3

Supplementary Figure 3. The effect of fasting on the 1st and 2nd phases of formalin-induced spinal nociceptive signaling.

(A) Formalin-induced spinal firings in the 1st and 2nd phases of free-fed and 24 fasted, and 24 fasted + AM 6545 mice. **(B)** There was no difference in the firing frequency of the 2nd phase between the three groups (p>0.05, one-way ANOVA followed by Tukey test).



Supplementary Figure 4

Supplementary Figure 4. The effect of 24h/48h fasting on formalin-induced acute visceral pain model

(A) Time course of spontaneous pain behavior following intraplantar injection of formalin. **(B)** Formalin-induced pain behavior was divided into two phase and analyzed. *p<0.05, **p<0.01, ***p<0.001 (**(B)** one-way ANOVA followed by Tukey test)