

Title: Natural (Δ^9 -THC) and synthetic (JWH-018) cannabinoids induce seizures by acting through the cannabinoid CB₁ receptor.

Authors

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Supplementary Information

Suppl. Fig. 1. EEG and EMG traces after administration of cannabinoids. A. At 4 h after Δ^9 -THC (10 mg/kg) administration. **B.** At 24 h after Δ^9 -THC (10 mg/kg) administration. **C.** At 4 h after JWH-018 (2.5 mg/kg) administration. **D.** At 24 h after JWH-018 (2.5 mg/kg) administration. EEG spikes are circled in the enlarged view. The analysed period in **B** and **D** includes the first hour of the dark phase of the following day.

Suppl. Fig. 2. EEG, EMG and LMA traces following administration of AM-251 (5 mg/kg).

Video S1. Seizure activity following i.p. administration of synthetic cannabinoid JWH-018.

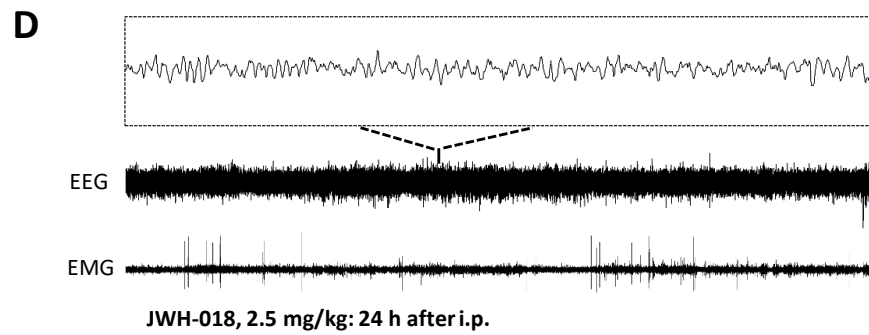
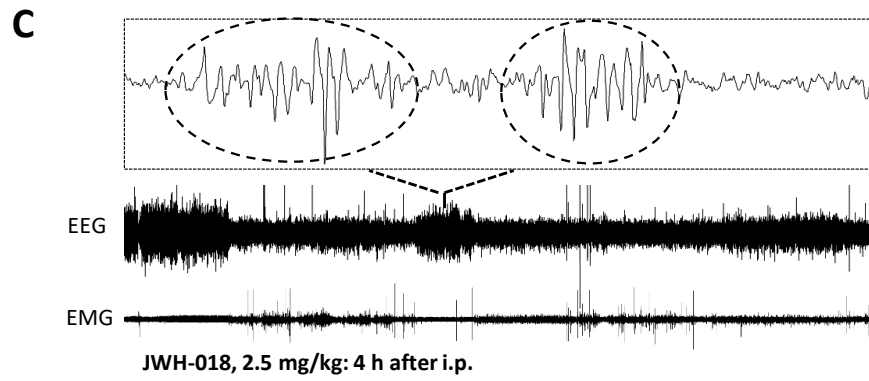
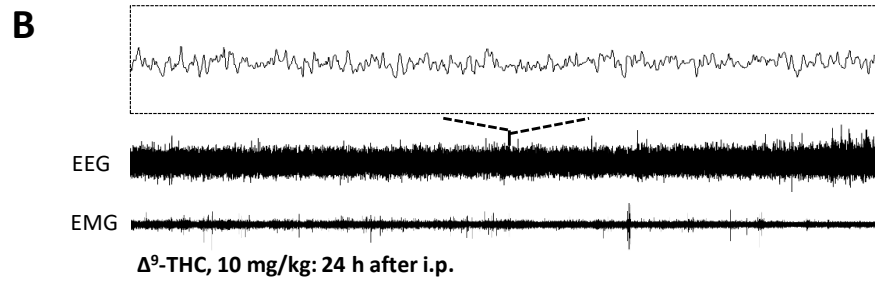
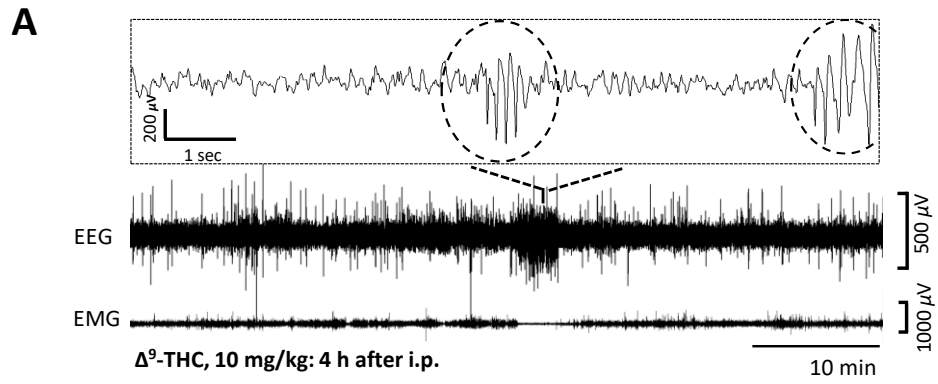
Video S2. Behavioral reactions to i.p. administration of synthetic cannabinoid JWH-018.

Video S3. Behavioral reactions to, and seizure activity after, i.p. administration of Δ^9 -THC.

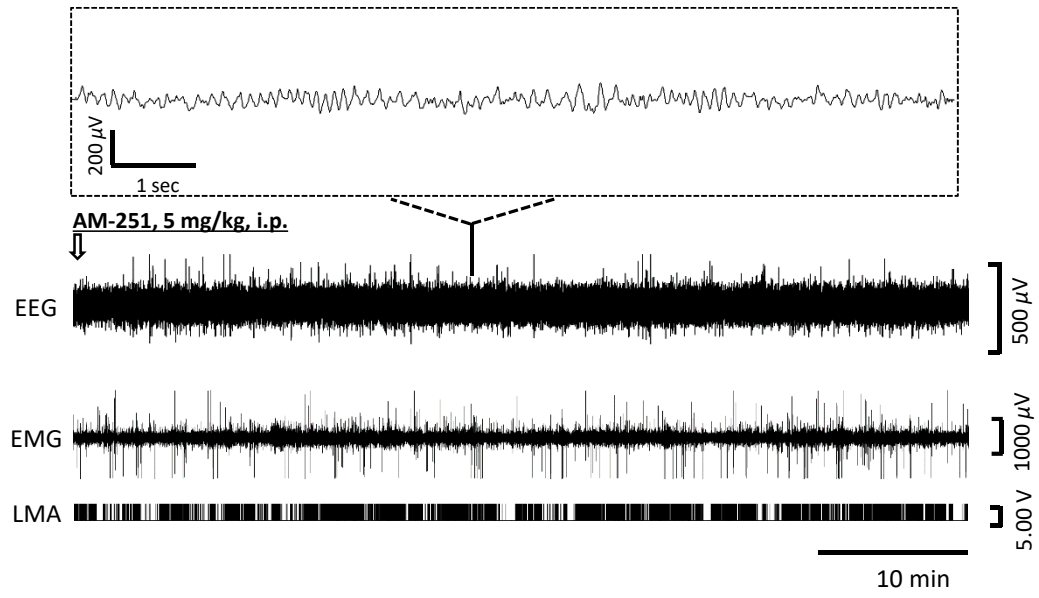
Suppl. Table 1. Behavioral events duration after Δ^9 -THC (10 mg/kg) or JWH-018 (2.5 mg/kg) administration. Events were quantified for a period of 1 h following i.p.; only

behavior with a score 2 and above (see Methods) were included in the analysis. (*, $p > 0.05$, unpaired t-test)

Suppl. Fig. 1



Suppl. Fig. 2



Suppl. Table 1

		$\Delta 9$ -THC (10 mg/kg)	JWH-018 (2.5 mg/kg)
<i>events/h</i>			
average number (\pm s.e.m.)			
duration	1-4 sec	15.2 \pm 4.3	34 \pm 4.4*
	5-8 sec	0	6 \pm 1*
	Total	15.2 \pm 4.3	40 \pm 4.5*