Dopamine D1 vs D5 receptor-dependent induction of seizures in relation to DARPP-32, ERK1/2 and GluR1-AMPA signalling.

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Table 1. SKF 83822-induced EEG profile in D_1, D_5 and DARPP-32 knockouts

Genotype	Number per group (*n*)	Latency to 1st seizure (min)	Total number of EEG seizures	Number of type IV EEG seizures
D_1 WT	5	19±2	12±3	9±2
D_1 HET	5	34±4*	2±1**	1±1**
D_1 KO	5	no seizures	0**[a]	0**
D_5 WT	5	17±2	8±1	5±2
D_5 HET	5	27±1**	2±1**	2±1
D_5 KO	5	25±4 (*n*=4) no seizures (*n*=1)	2±1**	1±1*
DARPP-32 WT	5	21±1	5±1	4±1
DARPP-32 KO	5	34±4** (*n*=2) no seizures (*n*=3)	1±1*	1±1**

SKF 83822 (2.0 mg/kg) was administered subcutaneously into the flank in a volume of 4.0 ml/kg followed immediately by extradural EEG recording for 60 min. WT = wild-type; HET = heterozygous knockout; KO = homozygous knockout. *$p < 0.05$ and **$p < 0.01$ vs respective WT; [a]$p < 0.01$ vs D_1 HET. Type IV seizures correspond to high frequency, high voltage EEG patterns (see Fig. 2).