

The effect of *ARHGEF15* knockout and forebrain-specific human *ARHGEF15* knock-in on seizure susceptibility in mice

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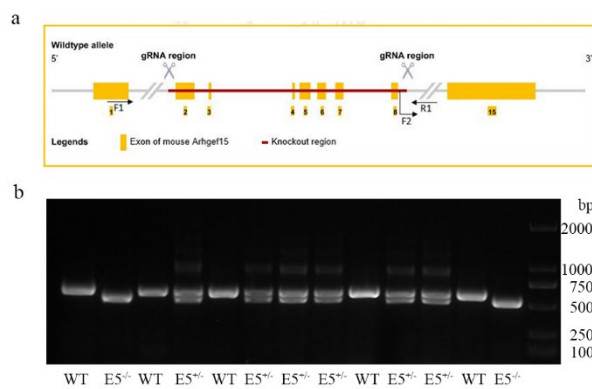


Fig. S1. The genotype identification of the *ARHGEF15* knockout mice. a: The genotyping strategy and the primers (F1: 5'-TCCCAAGGGAGCACGGAAGTGAATG-3', F2: 5'-TGGTGGCTGTAGAGTAGGCTGAGAG-3', R1: 5'-CAAGAGACTGGAGCAGAAGACTGCA-3'); b: Three genotypes were identified by agarose gel electrophoresis (WT: 608 bp, E5^{+/-}: 532 bp / 608 bp, E5^{-/-}: 532 bp).

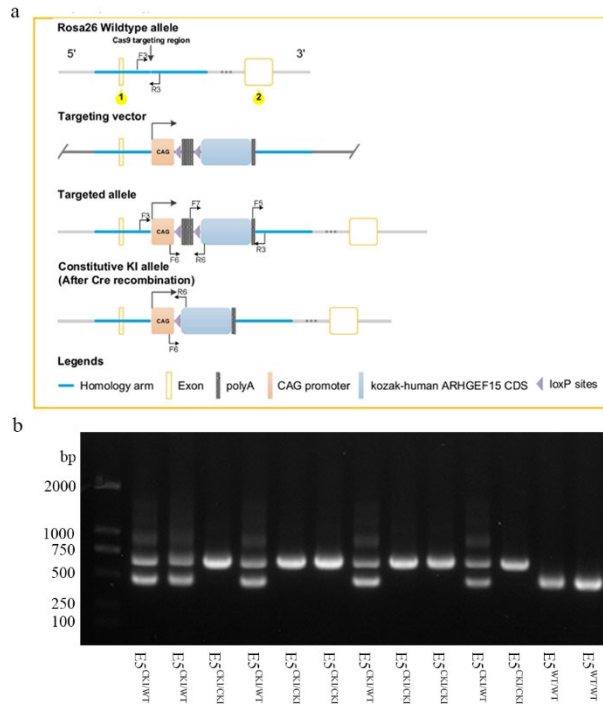


Fig. S2. The genotype identification of the human *ARHGEF15* conditional knock-in mice. a: The genotyping strategy and the primers (F3: 5'-CACTTGCTCTCCCAAAGTCGCTC-3', F5: 5'-GCATCTGACTTCTGGCTAATAAAG-3', R3: 5'-ATACTCCGAGGCGGATCACAA-3'); b: Three genotypes were identified by agarose gel electrophoresis (E5^{WT/WT}: 453 bp, E5^{CKI/WT}: 453 bp / 644 bp, E5^{CKI/CKI}: 644 bp).

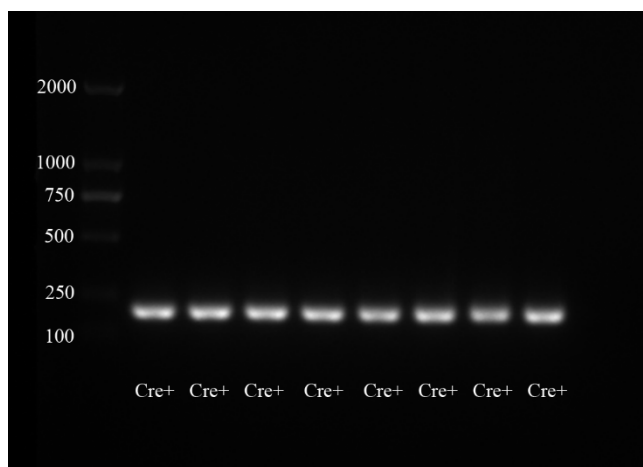


Fig. S3. The genotype identification of the Cre⁺ mice. The Cre positive mice showed

the band at 204 bp (the forward primer: 5'-GAACGCACTGATTTCGACCA-3', the reverse primer: 5'-GCTAACCAGCGTTTTTCGTTC-3').