

Supporting Information

Baraban et al. 10.1073/pnas.0900141106

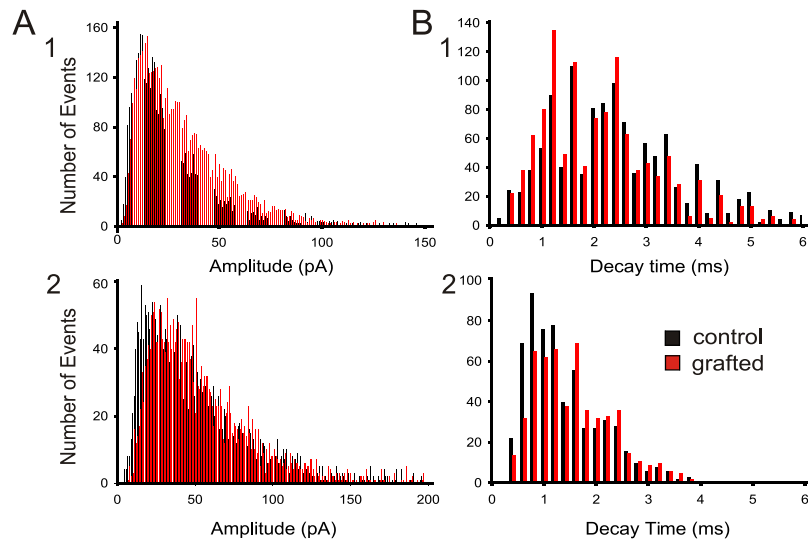


Fig. S1. IPSC amplitude and decay kinetics. (A) Cumulative amplitude frequency histograms of sIPSCs recorded from pyramidal cells (A1) and interneurons (A2) in the host brain. After MGE cell transplantation, the frequency distribution of sIPSCs recorded from either host pyramidal cells, but not interneurons, was statistically different (Kolmogorov–Smirnov test, $P < 0.05$). Data are pooled from the same number of cells from either control or grafted mice; e.g., $n = 20$ cells in each group for pyramidal cells and $n = 18$ for interneurons. (B) Cumulative decay-time frequency histograms of sIPSCs recorded from pyramidal cells (B1) and interneurons (B2) show no difference between control and grafted mice (Kolmogorov–Smirnov test, $P > 0.05$).

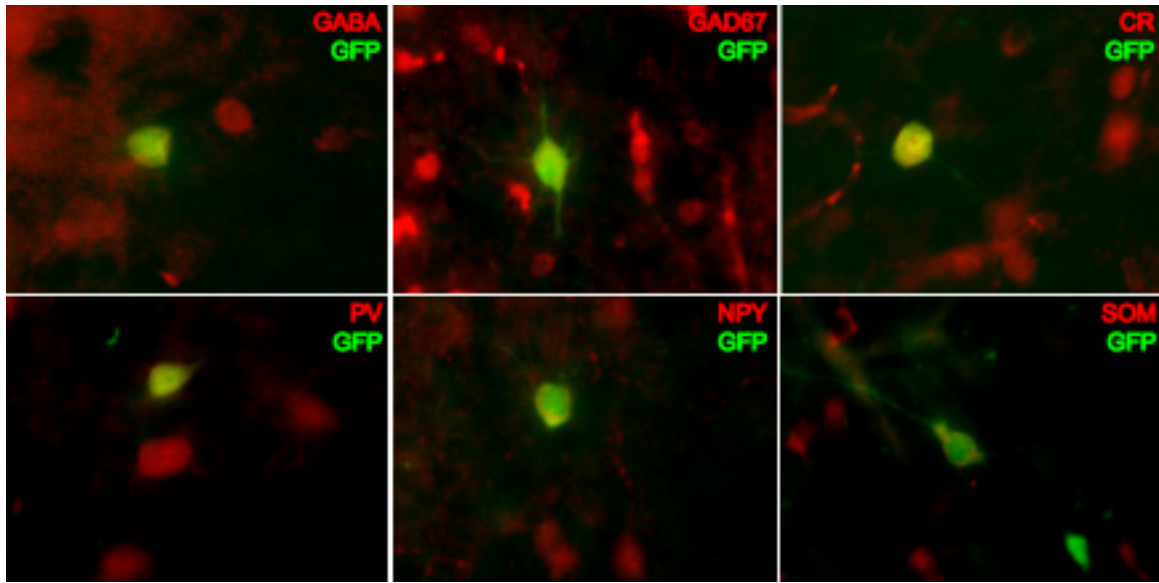


Fig. S2. Interneuron subtypes in Kv1.1 mice. Immunohistochemical coexpression of GFP⁺ cells with GABA, GAD67, CR, PV, NPY, and SOM. Representative cortical neurons are shown at 30 DAT in tissue sections from Kv1.1^{-/-} mice receiving bilateral MGE grafts at P2.

Table S1. Analysis of EEG seizures

Animal	Duration, sec*	Frequency, per hour	Seizure score
<i>Kv1.1 KO</i>			
No. 307	38.6 ± 3.7	0.6	Grade IV
No. 419	57.5 ± 16.4	0.7	Grade IV
No. 461	59.0 ± 9.3	2.2	Grade IV
No. 466	58.0 ± 7.4	2.4	Grade IV
No. 707	33.6 ± 1.7	1.0	Grade IV
No. 729	50.9 ± 6.4	1.0	Grade IV
No. 738	86.7 ± 2.2	0.5	Grade IV
No. 747	59.6 ± 5.4	0.8	Grade IV
<i>Kv1.1 KO + MGE</i>			
No. 428	24.7 ± 2.2	0.1	Grade IV
No. 492	17.8 ± 2.2	0.1	Grade IV
No. 525	0	0	Grade II
No. 533	0	0	Grade II
No. 544	23.7 ± 4.2	0.5	Grade IV
No. 573	27.5 ± 4.4	0.4	Grade IV
No. 575	28.0 ± 2.1	0.1	Grade IV
No. 710	14.0 ± 3.1	0.1	Grade IV

*Duration data are shown as mean ± SEM.