

Figure S1

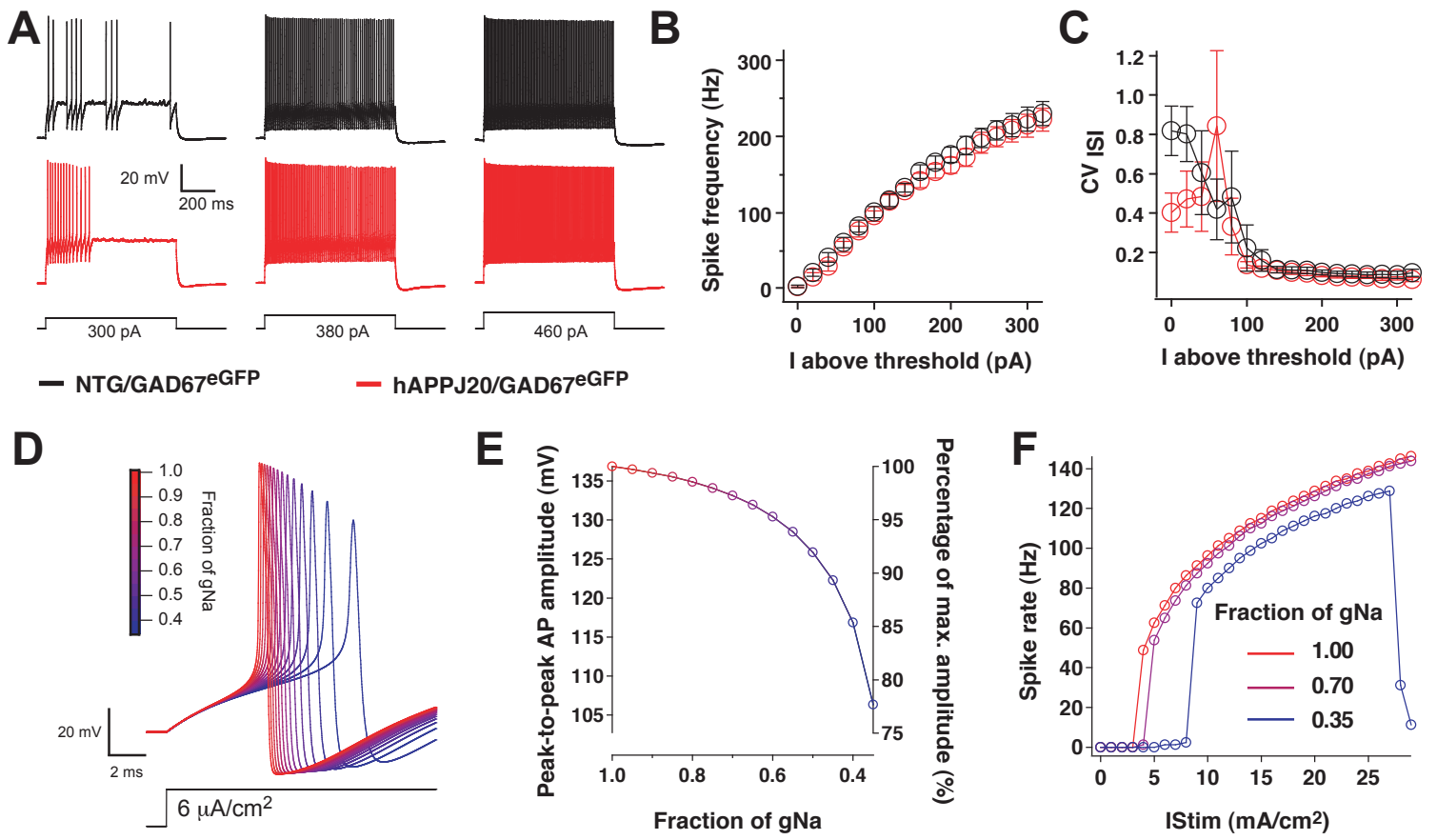


Figure S2

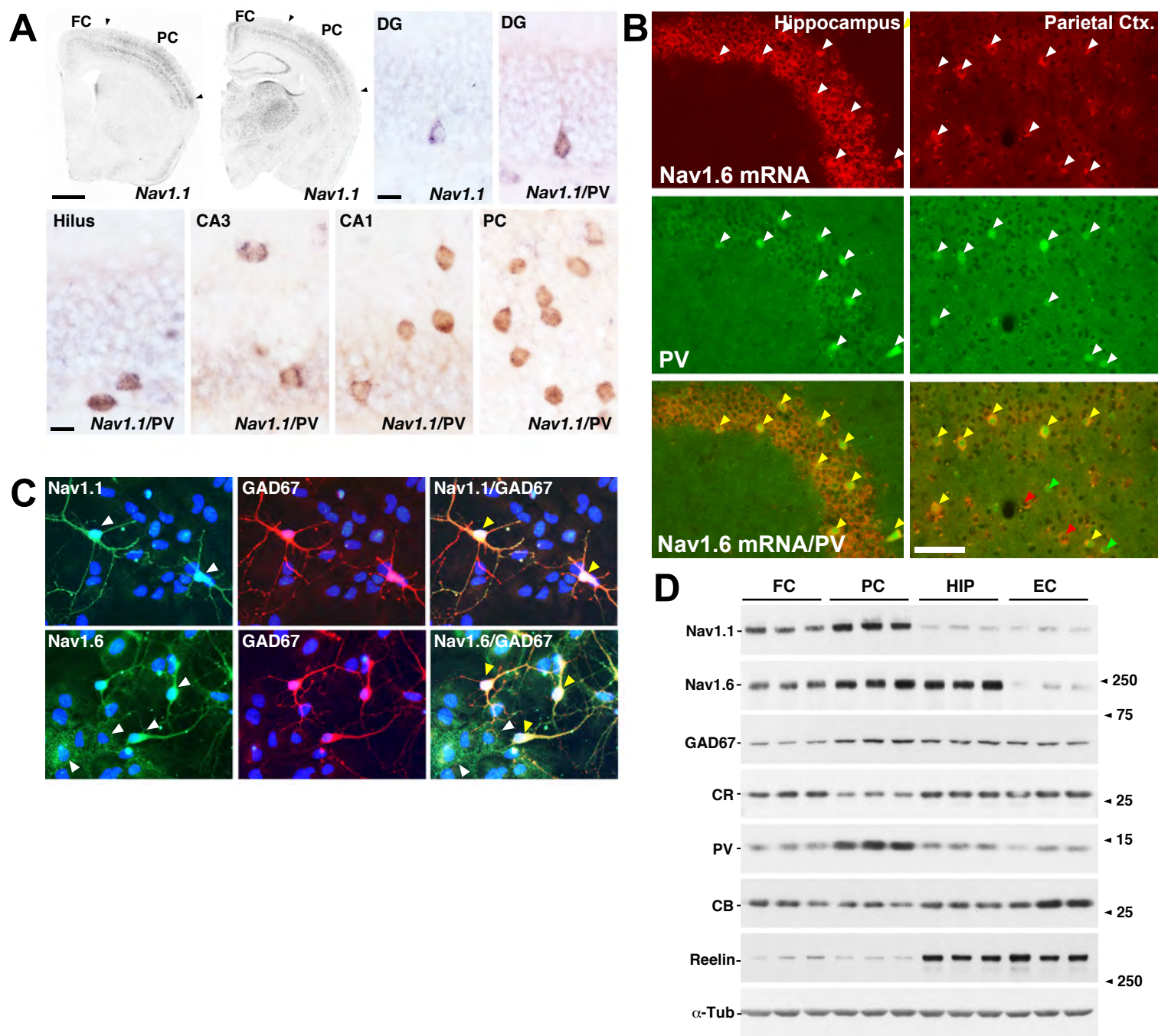


Figure S3

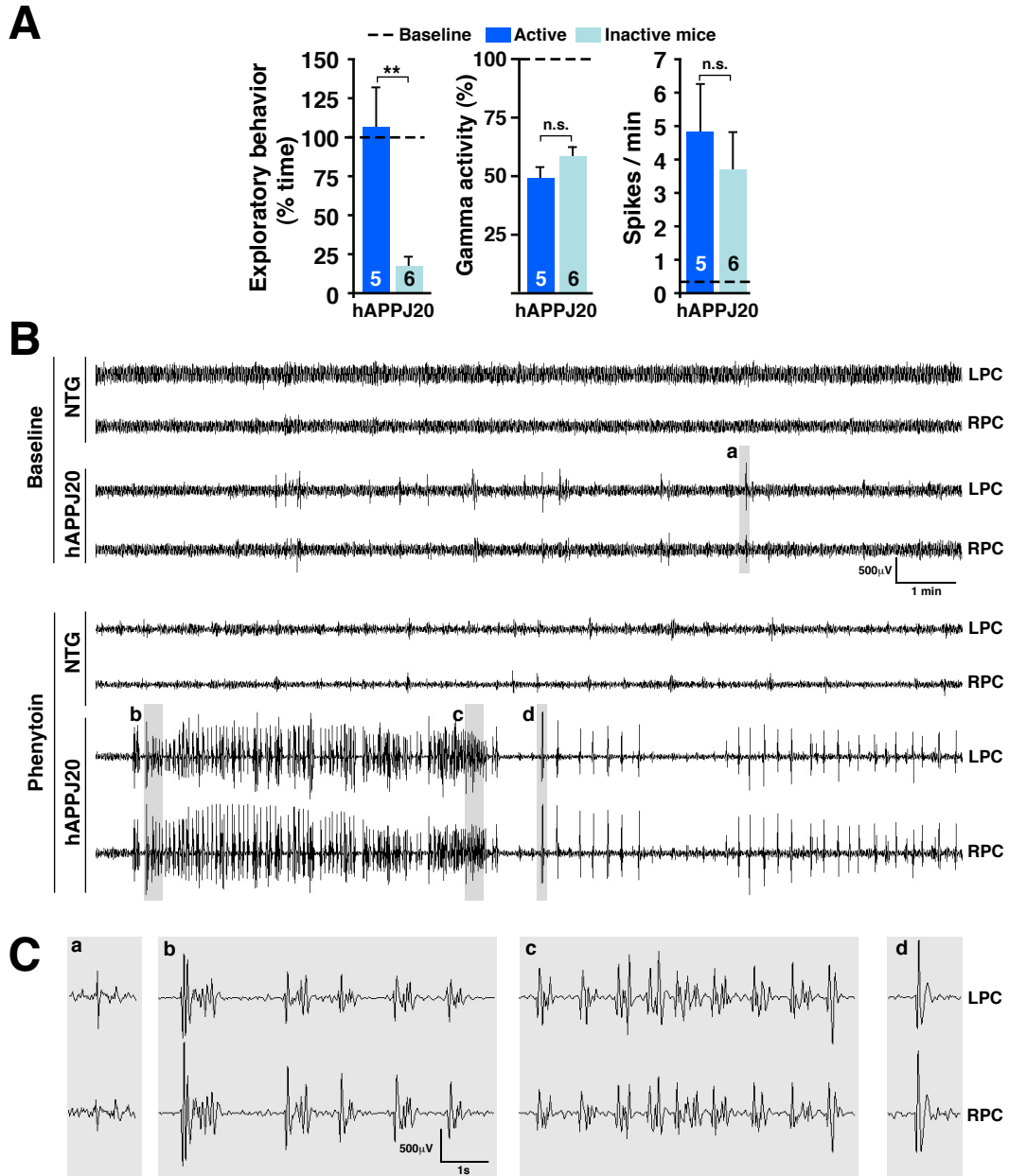


Figure S4

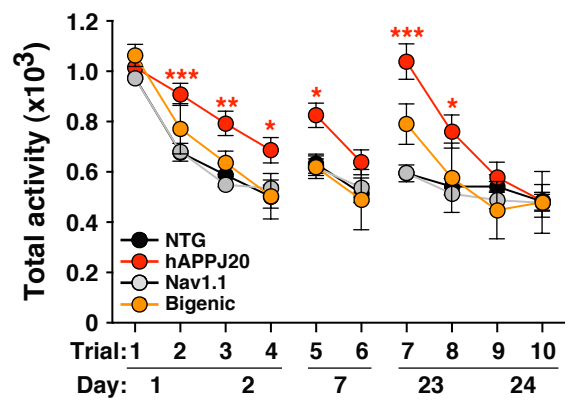


Figure S5

Measurement	NTG/GAD67 ^{eGFP}	hAPPJ20/GAD67 ^{eGFP}	p value
AP amplitude at -70mv (mV) (threshold to peak)	64.76 ± 1.38	57.23 ± 1.62	0.002*
AP amplitude at -70mv (mV) (peak to AHP)	87.25 ± 1.50	79.11 ± 1.21	0.001*
AP amplitude at RMP (mV) (peak to AHP)	86.9 ± 1.5	79.3 ± 3.0	0.025*
AP half width (ms)	0.28 ± 0.01	0.29 ± 0.01	0.522
Ri(MΩ)	147.69 ± 16.35	165.27 ± 22.38	0.983
Cm (pF)	56.44 ± 3.57	56.31 ± 4.58	0.792
Membrane time constant (ms)	7.70 ± 0.31	8.45 ± 0.50	0.189
RMP (mV)	-66.83 ± 0.92	-60.37 ± 1.34	<0.001*
Threshold current (pA)	160.00 ± 15.69	160.00 ± 21.29	0.967
Threshold current (pA/pF)	2.86 ± 0.21	2.76 ± 0.23	0.690

Measurement	NTG/Pyr	hAPPJ20/Pyr	p value
RMP (mV)	-70.5 ± 0.5	-71.3 ± 0.9	0.50
AP amplitude at RMP (mV)	94.9 ± 2.2	92.9 ± 1.6	0.47

AHP, afterhyperpolarization; Cm, membrane capacitance; Ri, input resistance; RMP, resting membrane potential. Quantitative data represent mean ± SEM. *p<0.05 by Student's t test.

Table S1