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Author Correction: Rare *CASP6*N73T variant associated with hippocampal volume exhibits decreased proteolytic activity, synaptic transmission defect, and neurodegeneration

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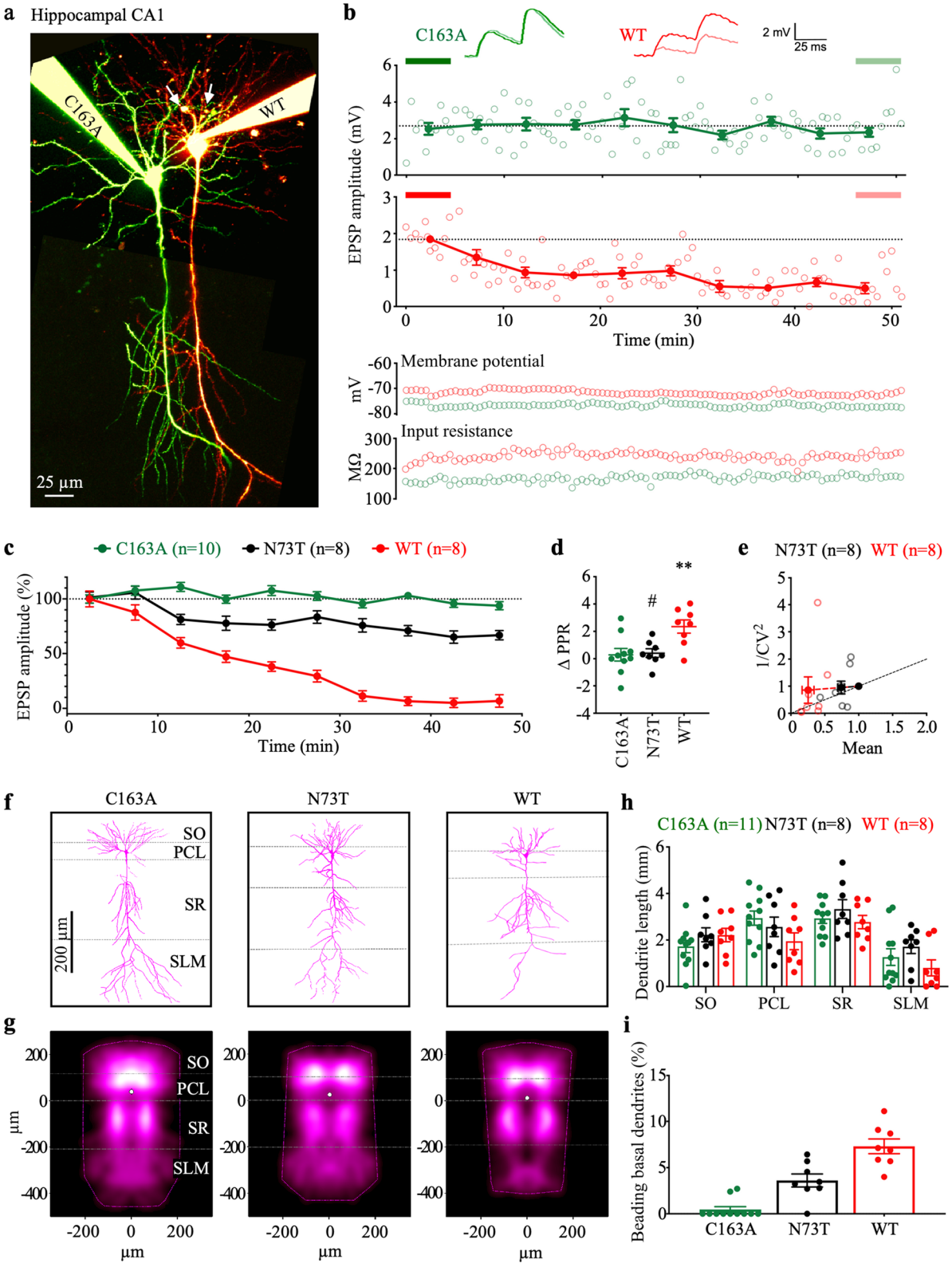
The original version of this Article contained an error in Fig. 7g where the density maps in panel (g) were rendered incorrectly due to an error in the custom code. The different cell morphologies were not aligned properly, giving rise to a duplicated image and a widened impression in Fig. 7g. The original Fig. 7 and accompanying legend appear below.

The original Article has been corrected.


a
Hippocampal CA1
C163A
WT
25 µm
b
C163A
WT
2 mV
25 ms
EPSP amplitude (mV)
Time (min)
Membrane potential
mV
Input resistance
MΩ
c
C163A (n=10)
N73T (n=8)
WT (n=8)
EPSP amplitude (%)
Time (min)
d
Δ PPR
**
#
C163A
N73T
WT
e
N73T (n=8)
WT (n=8)
1/CV²
Mean
f
C163A
N73T
WT
SO
PCL
SR
SLM
200 µm
g
SO
PCL
SR
SLM
µm
h
C163A (n=11)
N73T (n=8)
WT (n=8)
Dendrite length (mm)
SO
PCL
SR
SLM
i
Beading basal dendrites (%)
C163A
N73T
WT

◂**Figure 7.** Casp6N73T is less damaging to neuronal function and neurodegeneration than Casp6WT. (**a**) Representative two-photon images of 10 pg Casp6C163A- (Alexa 488, green) and 10 pg Casp6WT- or Casp6N73T- (Alexa 594, red) patched hippocampal CA1 pyramidal neurons. White arrows indicate basal dendrite degeneration. Scale bar: 25 µm. Maximum-intensity projection of two-photon stacks was compiled using ImageJ, and imaging montage of entire neurons was performed using Affinity Designer 1.7. (**b**) Sample EPSP time course plots from Casp6C163A- (green) and Casp6WT- (red) patched neurons in (**a**), showing reduction of neurotransmission for Casp6WT (1.53 ± 0.32 mV, n = 8 vs. 0.14 ± 0.07 mV, n = 8, $p < 0.01$) but not for Casp6C163A (1.94 ± 0.32 mV, n = 10 vs. 1.91 ± 0.29 mV, n = 10, $p = 0.76$) when comparing the last 10 traces (light thick line) to the first 10 traces (dark thick line). Open circles: EPSP amplitude recorded every 30 s. Closed circles: EPSP amplitude binned and averaged across 10 traces. Inset: representative EPSP traces highlight the paired-pulse ratio (PPR). Scale bars: 2 mV, 25 ms. Resting membrane potential and input resistance remained stable throughout experiment. (**c**) EPSP time courses for Casp6C163A- (n = 10), Casp6N73T- (n = 8), or Casp6WT- (n = 8) patched neurons. (**d**) PPR from Casp6WT-, Casp6C163A- or Casp6N73T-patched neurons. One-way ANOVA ($p = 0.0043$), followed by Tukey's post-hoc test ($^{**}p < 0.01$ vs. C163A; $^{\#}p < 0.05$ vs. WT). (**e**) CV analysis of Casp6N73T- and Casp6WT-patched neurons. Casp6C163A was unaltered. (**f**) Representative reconstructions of Casp6C163A-, Casp6N73T-, or Casp6WT-patched neurons. Image stacks were used for manual reconstruction of 3D morphologies using the Neuromantic freeware (http://www.reading.ac.uk/neuromantic/body_index.php). (**g**) Dendritic density maps of Casp6C163A- (n = 11), Casp6N73T- (n = 8), or Casp6WT- (n = 8) patched neurons generated using custom software running in Igor Pro 8 v8.04 (https://www.wavemetrics.com, https://github.com/pj-sjostrom/qMorph). Dotted lines show the convex hull of the maximum extent. (**h**) Cumulative dendritic length of reconstructed neurons in layers SO, PCL, SR, and SLM. (**i**) Casp6C163A-, Casp6N73T- and Casp6WT-patched CA1 pyramidal neurons beading basal dendrites. One-way ANOVA ($p = 0.0001$), followed by Tukey's test ($^{****}p < 0.0001$ vs Casp6C163A, $^{\#\#}p < 0.01$ vs Casp6WT).