

Erratum to: Mutant SOD1 protein increases $\text{Na}_v1.3$ channel excitability

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The original version of the article was also updated to reflect the below changes.

The Fig. 6 caption of this article should be:

Fig. 6 Firing patterns of a mammalian neuron in response to changes in Na_v conductance induced by hSOD1^{A4V}. **a** At the baseline (see Methods), there is no predicted spontaneous firing as modeled using NEURON software (*left*; resting membrane potential -62 mV). Transition from silence to firing was observed first at a conductance of 0.29 Siemens/ cm^2 (*right*). **b** When the Na_v conductance in the model is increased by 90% (from 0.25 to 0.475 Siemens/ cm^2 , which is the mean increment in conductance recorded experimentally), the model fires spontaneously (*left*). When this conductance is further increased to 1.34 Siemens/ cm^2 (a 4.4-fold increase), the model is depolarized to -27 mV and becomes unexcitable (*right*). **c** This demonstrates dependence of firing frequency on Na_v channel conductance, indicating that as the conductance increases there is a progressive increase in frequency until depolarization

The online version of the original article can be found at <http://dx.doi.org/10.1007/s10867-016-9411-x>.

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