

Table 1. Passive parameters for the L2/3 neuron models

	Cell 111200A	Cell 141200B	Cell 141200C	Average
E_{rest}	-75 mV	-75 mV	-75 mV	-75 mV
R_m (range) $\Omega \cdot \text{cm}^2$	11,900-15,000	16,400-19,300	14,300–16,950	
R_m (model) $\Omega \cdot \text{cm}^2$	14,000	18,500	16,500	16,333
C_m (range) $\mu\text{F}/\text{cm}^2$	0.83–1.05	0.73-0.86	0.75-0.89	
C_m (model) $\mu\text{F}/\text{cm}^2$	0.89	0.76	0.76	0.8

E_{rest} , the resting potential; R_m (range), the specific membrane resistivity, and C_m (range), the specific membrane capacitance, are the values that agree with the experimental input resistance and the measured membrane time constant, assuming that the specific axial resistivity, R_i , may range between 100 and 300 $\Omega \cdot \text{cm}$. For the model used, R_i was eventually fixed at 150 $\Omega \cdot \text{cm}$, and this determined uniquely the values for R_m and C_m used for the model.