

Supplemental Table 1

Location	Parameter	Value	Published Value	Reference
All Compartments:	$R_i$	105 $\Omega$ cm	150, 105, 80 $\Omega$ cm	1-3
	$C_m$	1 $\mu$ F/cm <sup>2</sup>	0.75, 1, 0.75 $\mu$ F/cm <sup>2</sup>	1-3
	$g_{leak}$	0.001	negligible effect, not reported , 0.033	1-3
	$E_{Na}$	50 mV	50, 60, 50 mV	1-3
	$E_K$	-87 mV	-90, -87, -90 mV	1-3
	$E_{leak}$	-70 mV	-70, -70, -70 mV	1-3
Axon Hodgkin-Huxley:	$g_{Na}$	360 mS/cm <sup>2</sup>	300, 1000, 300 mS/cm <sup>2</sup>	1-3
	$g_K$	10.8 mS/cm <sup>2</sup>	20, 10, 20 mS/cm <sup>2</sup>	1-3
Soma Hodgkin-Huxley:	$g_{Na}$	120 mS/cm <sup>2</sup>	0.2, 100, 0.2 mS/cm <sup>2</sup>	1-3
	$g_K$	3.6 mS/cm <sup>2</sup>	2, 1, 2 mS/cm <sup>2</sup>	1-3
Dendrites Hodgkin-Huxley:	$g_{Na}$	0.75-120 mS/cm <sup>2</sup>	0.2, 10, 0.2 mS/cm <sup>2</sup>	1-3
	$g_K$	0.225-3.6 mS/cm <sup>2</sup>	0.001, 0.3, 0 mS/cm <sup>2</sup>	1-3
Excitatory Synapse:	$t_{rise,fall}$	0.2, 1-16 ms	0, 0.5; 0.2, 5; 0.2,1.7; 0.05, 0.5 AMPA or 2.1, 18.8 NMDA ms	2,4-6
	$E_{excit. syn}$	0 mV	not reported, 0, 0, 0 mV	2,4-6
	$g_{peak}$	0.25-4 nS	1.5, 0.3-0.99, not reported, 1.5 AMPA or 3 NMDA nS	2,4-6
Inhibitory Synapse:	$t_{rise,fall}$	0.2, 1-16 ms	not modeled; not modeled; 0.75, 10; 0.5, 2 or 0.5, 100 ms	2,4-6
	$E_{inhib. syn}$	-70 mV	not modeled, not modeled, -75, -60 to -80 mV	2,4-6
	$g_{peak}$	0.25-4 nS	not modeled, not modeled, not reported, not reported, 0.5 nS	2,4-7
1. Mainen and Sejnowski, 1996				
2. Nevian et al., 2007				
3. van Elburg et al., 2010				
4. Katz et al., 2009				
5. Komendantov et al., 2009				
6. Jadi et al., 2012				
7. Bush and Sejnowski, 1994				