

Parameter	Description of parameter	Distribution	Mean \pm Std Dev	units
g_{KATP}	Max conductance of K_{ATP} channel current	Normal	2.31 ± 0.57	pA mV $^{-1}$
k_{glc}	Rate constant of glycolysis	Normal	0.000126 ± 0.0000315	ms $^{-1}$
g_{Coup}	Coupling conductance	Gamma, k=θ=4	120 ± 30	ps
g_{KTO}	Conductance of $I_{KCa(BK)}$ (voltage and Ca $^{2+}$) dependent transient outward K $^{+}$ current	Normal	2.13 ± 0.213	pA mV $^{-1}$
P_{SERCA}	Maximum rate of pumping Ca $^{2+}$ into ER	Normal	0.096 ± 0.0096	amole ms $^{-1}$
P_{NaCa}	Maximum amplitude of I_{NaCa} , Na $^{+}$ /Ca $^{2+}$ exchanger	Normal	204 ± 20	pA
P_{rel}	Converting factor for Ca $^{2+}$ release from ER	Normal	0.46 ± 0.46	fL ms $^{-1}$
P_{op}	Maximum rate of ATP production from oxphos	Normal	0.0005 ± 0.00005	ms $^{-1}$
[ATP $_{tot}$]	Total amount of ATP species	Normal	4 ± 0.4	mM

Supplemental Table