

| Independent Variable | Description | Value |
|-----------------------------|---|-----------------------------------|
| $[\text{Na}^+]_o$ | Extracellular Composition | 140mM |
| $[\text{K}^+]_o$ | Extracellular Composition | 5.4mM |
| $[\text{Ca}^{2+}]_o$ | Extracellular Composition | 2.6mM |
| C_m | Cell Capacitance | 6.158pF |
| vol_i | Cell Cytosol Volume | 764fl |
| vol_{ER} | Endoplasmic Reticulum Volume | 280fl |
| f_i | Cytosolic Ca^{2+} Buffer Strength | 0.01 |
| f_{ER} | ER Ca^{2+} Buffer Strength | 0.025 |
| P_{CaV} | Converting factor for I_{CaV} | 48.9pA mM^{-1} |
| P_{KDr} | Converting factor for I_{KDr} | 2.1pA mM^{-1} |
| $G_{\text{KCa(BK)}}$ | Conductance of $I_{\text{KCa(BK)}}$ | 2.13pA mV^{-1} (10%)* |
| $P_{\text{KCa(SK)}}$ | Converting factor of $I_{\text{KCa(SK)}}$ | 0.2pA mM^{-1} |
| P_{bNSC} | Converting factor of I_{bNSC} | 0.00396pA mM^{-1} |
| P_{SOC} | Converting factor of I_{SOC} | 0.00764pA mM^{-1} |
| $K_{0.5\text{ER}}$ | Half activation conc. Of Ca^{2+} in ER | 0.003mM |
| $G_{\text{K(ATP)}}$ | Max conductance of I_{KATP} | 2.31pA mV^{-1} (25%)* |
| P_{NaK} | Max amplitude of I_{NaK} | 350 Pa ms |
| P_{NaCa} | Max amplitude of I_{NaCa} | 204pA (10%) |
| P_{PMCA} | Max amplitude of I_{PMCA} | 1.56pA |
| P_{SERCA} | Max pump rate of Ca^{2+} into ER | 0.096fl ms^{-1} (10%)* |
| P_{rel} | Converting factor for ER Ca^{2+} release | 0.46fl ms^{-1} (10%)* |
| k_{glc} | Rate constant for glycolysis | 0.000126 ms^{-1} (10%)* |
| $K_{\beta\text{ox}}$ | Rate constant of β -oxidation | 0.0000063 ms^{-1} (10%)* |
| P_{Op} | Max rate of ATP production | 0.0005 ms^{-1} (10%)* |
| $[\text{ATP}_{\text{tot}}]$ | Total ATP species | 4mM (10%)* |
| k_{ATP} | Rate Const. of Ca^{2+} ind. Ca^{2+} consumption | 0.000062 ms^{-1} |
| $k_{\text{ATP,Ca}}$ | Rate Const. of Ca^{2+} dep. ATP consumption | 0.187mM $^{-1}$ ms^{-1} |
| $k_{\text{ADP,f}}$ | Rate Constant of ADPf to ADPb | 0.0002 ms^{-1} |
| $k_{\text{ADP,b}}$ | Rate Constant of ADPb to ADPf | 0.00002 ms^{-1} |