Biophysical Journal, Volume 98

Supporting Material

Tissue-specific mathematical models of slow wave entrainment in wild-type and 5-HT_{2B} knockout mice with altered interstitial cells of Cajal networks

Peng Du, Greg O'Grady, Simon J. Gibbons, Rita Yassi, Rachel Lees-Green, Gianrico Farrugia, Leo K. Cheng, and Andrew J. Pullan

TABLE 1

Parameter	Description	Value
β	Modulator of sensitivity of IP_3 to V_m	$2.7x10^{-5}$ mM s^{-1}
η	Rate constant for linear IP_3 degradation	0.015 s^{-1}
U	Hill coefficient	4
V_{m4}	Maximal rate of voltage dependent IP_3 synthesis	$3.33\ x10^{-5}$ mM s^{-1}
k_4	Half saturation constant for the nonlinear IP_3 degradation	0.0005 mM
P_{mV}	Maximal rate of voltage dependent IP_3 synthesis	$1.33\ x10^{-5}$ mM s^{-1}
K_v	Half saturation constant for voltage dependent IP_3 synthesis	-58 mV
R	Hill coefficient	8

Table 1. Redimensionalized parameter values of the IP_3 component of the slow wave model by Imtiaz et al.