

Parameter	Purkinje Cells	Platelets	Description
c_0	2.0 μM	2.0 μM	Total $[\text{Ca}]^{2+}$ in terms of cytosolic volume
c_1	0.185	0.185	(ER volume/cytosolic volume)
v_1	6 s^{-1}	6 s^{-1}	Max Ca^{2+} channel flux
v_2	0.11 s^{-1}	0.11 s^{-1}	Ca^{2+} leak flux constant
v_3	0.9 μMs^{-1}	0.9 μMs^{-1}	Max Ca^{2+} uptake
k_3	0.1 μM	0.1 μM	Activation constant for ATP- Ca^{2+} pump
<i>Receptor binding constants</i>			
a_1	400 $\mu\text{M}^{-1}\text{s}^{-1}$	4000 $\mu\text{M}^{-1}\text{s}^{-1}$	IP3
a_2	0.2 $\mu\text{M}^{-1}\text{s}^{-1}$	2 $\mu\text{M}^{-1}\text{s}^{-1}$	Ca^{2+} (inhibition)
a_3	400 $\mu\text{M}^{-1}\text{s}^{-1}$	4000 $\mu\text{M}^{-1}\text{s}^{-1}$	IP3
a_4	0.2 $\mu\text{M}^{-1}\text{s}^{-1}$	2 $\mu\text{M}^{-1}\text{s}^{-1}$	Ca^{2+} (inhibition)
a_5	20 $\mu\text{M}^{-1}\text{s}^{-1}$	200 $\mu\text{M}^{-1}\text{s}^{-1}$	Ca^{2+} (activation)
<i>Receptor dissociation constants ($d_i = b_i/a_i$)</i>			
d_1	0.13 μM	0.065 μM	IP3
d_2	1.049 μM	0.52 μM	Ca^{2+} (inhibition)
d_3	943.4 nM	471.7 nM	IP3
d_4	144.5 nM	72.2 nM	Ca^{2+} (inhibition)
d_5	82.34 nM	41.2 nM	Ca^{2+} (activation)

Table S1 Comparison of the parameters originally proposed to describe Ca^{2+} mobilization in Purkinje cells (De Young and Keizer, 1992) and the parameters used in the modeling of PAR1-induced Ca^{2+} mobilization in human platelets.