

Parameter	μ^* (3 s.f.) μM	Proportionality
$k_{f,16}$	4.54×10^{-2}	(-)
R_{pc}	4.35×10^{-2}	(+)
$k_{f,14}$	3.72×10^{-2}	(+)
$k_{r,8}$	1.93×10^{-2}	(-)
$k_{r,8}$	1.92×10^{-2}	(+)
P	1.87×10^{-2}	(+)
P_c	1.83×10^{-2}	(+)
Ca	1.83×10^{-2}	(+)
$PIP2$	1.39×10^{-2}	(+)
$K_{m,14}$	1.38×10^{-2}	(-)

Table S2: Model sensitivity analysis results: Baseline Concentration The full list of significant parameters is given. Parameters are ranked by μ^* . Additionally, a column depicting whether the parameter is proportional (+) or inversely proportional (-) to the objective function is supplied. The measure of proportionality is taken from the sign of μ , hence reveals the effect of the parameter on the objective function direction on average across all tests.