
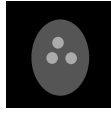
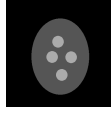



Table S3. Geometric parameters used in the model.

Name	Simulation*	Figure	Cell surface (μm^2)/ Cytoplasm volume (μm^3)	ICSC surface (μm^2)/ ICSC volume (μm^3)	Image	Size (μm)	Mesh (elements)
cell 1	C	S9, S11	2826.9/ 14134.5†	1500/ 1413.4	-	-	-
cell 2	C	S10A	2826.9/ 14134.5	500,1000,1500,2000/ 1413.4	-	-	-
cell 3	C	S10A	2826.9/ 14134.5	1500/ 141.3,1413.4,14134.5	-	-	-
cell 4	S	15	-	-		60x60	100x100
cell 5	S	S10B	-	-		60x60	100x100
cell 6	S	S10B	-	-		60x60	100x100
cell 7	S	S10B	-	-		60x60	100x100

* C = compartmental, S = spatial. †equivalent to a sphere of radius 15 μm .