

# Supplementary material for “Non-uniform distribution of myosin-mediated forces governs red blood cell membrane curvature through tension modulation”

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Table 2: Notation used in the model

Notation	Description	Units
$R_0$	Radius of the RBC cell	nm
$\kappa_0$	Bending rigidity of the lipid	pN
$F_{\text{uniform}}$	Uniformly applied force	pN/ $\mu\text{m}^2$
$F_{\text{dimple}}$	Local force at dimple region	pN/ $\mu\text{m}^2$
$F_{\text{rim}}$	Local force at rim region	pN/ $\mu\text{m}^2$
$A_{\text{dimple}}$	Membrane surface are in the dimple region	$\text{m}^2$
$A_{\text{rim}}$	Membrane surface are in the rim region	$\text{m}^2$
$V_{\text{dimple}}$	Occupied volume by the dimple region	$\text{m}^3$
$V_{\text{rim}}$	Occupied volume by the rim region	$\text{m}^3$
$r$	Dimensionless radial distance	
$z$	Dimensionless height	
$h$	Dimensionless mean curvature	
$m$	Dimensionless M	
$\tilde{\lambda}$	Dimensionless surface tension	
$\tilde{p}$	Dimensionless pressure	
$\tilde{\mathbf{f}}$	Dimensionless force	
$\tilde{\kappa}$	Dimensionless bending modulus	
$t$	Dimensionless arclength	
$F_{\text{ratio}}$	Ratio of the force at the dimple versus the rim region	