

Table S1 The variables and parameters.

	notation	value
RhoA-GDP	[RhoGDP]	
RhoA-GTP	[RhoGTP]	
ROCK-I	[Rock]	
active ROCK-I	[Rock*]	
RMLC	[MLC]	
phosphorylated RMLC	[pMLC]	
input of signal	α	0.1
activation rate of RhoGTP signaling	β	0.1
degradation rate of RhoGTP	δ	
expression rate of Rock	λ	0.1
activation rate of Rock	μ_1	0.1
reaction constant of Rock activation	k_1	1.0
degradation rate of active Rock*	γ	0.01
phosphorylation rate of MLC	μ_2	0.1
reaction constant of MLC phosphorylation	k_2	1.0
dephosphorylation rate of pMLC	μ_3	0.1
reaction constant of pMLC dephosphorylation	k_3	1.0
reaction constant of inhibition of pMLC dephosphorylation	k_4	1.0