TABLE 2. Default parameters.
Parameters correspond to kinetic and equilibrium constants for the barbed end obtained from the literature or derived from thermodynamic constraints (see footnotes and references below) as described in [1]. Parameter definitions are provided on Figure 3.

Concentrations	$[Pi]$ (μM)	$[ATP]$ (μM)	$[ADP]$ (μM)	$[P]$ (μM)
	100	**1000**	**100**	**10**
Rate Constants	k_{Pi-} (s^{-1})	k_H (s^{-1})		
	0.0026[2]	**0.3**[3]		
Ratios	r_{Pi}	r_{Pie}	r_H	r_{He}
	1	**8000**[4]	**1**	**1**
Equilibrium Constants	K_{dPi} (mM)	K_{dGPi} (mM)	K_{dGATP} (μM)	K_{dGADP} (μM)
	1.5[4]	**47***	**0.007**[2]	**0.094**[2]

Actin Forms

Form	k_{n+} $(s^{-1}\cdot\mu M^{-1})$	k_{n-} (s^{-1})	r_{n+}	$K_{dn}(\mu M)$	K_{dbn} (μM)	A_{cn} (μM)
A	**7.4**†	**0.25**†	**1**†	**0.013**[2]	**15**†	**0.034**¶
T	**7.4**[5]	**0.26**‖	**1**[6,7]	**0.099**[2]	**15**[6,8]†	**0.035**¶
I	**3.4**[4]	**0.20**[4]	**1**†	**0.100**†	**15**[6,8]†	**0.059**¶
D	**2.9**[4]	**5.4**[4]	**1**[6]	**0.120**[2]	**15**[6,8]†	**1.86**¶

*Obtained from the thermodynamic constraint $A_{cI} = A_{cD} \cdot K_{dPi} / K_{dGPi}$
†Assumed to be similar to parameters for other forms.
¶Obtained from the thermodynamic constraints $A_{cn} = k_{n-}/k_{n+}$
‖Obtained from the analytical solution using experimental values for actin critical concentration in presence of ATP as derived in [1].

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