

Table 1. Kinetic parameters of ParM and actin. All values are for the Mg^{2+} -bound form unless otherwise indicated. K_d , dissociation constant.

Parameter	Actin	ParM	Method
Steady-state ATP critical concentration (Mg^{2+})	100 nM	2.3 μ M	Pelleting, FRET assay, microscopy
Steady-state ATP critical concentration (Ca^{2+})	440 nM (in 100 mM KCl)	6.8 μ M	Pelleting
ATP critical concentration	Barbed end: 100 nM Pointed end: 600 nM	550 to 680 nM	FRET assay (BeF-ATP-ParM and ATP-E148A)
ADP critical concentration	1 μ M	\sim 100 μ M	Pelleting
ATP-monomer on-rate	Barbed end: 10 μ M $^{-1}$ s $^{-1}$ Pointed end: 1 μ M $^{-1}$ s $^{-1}$	4 to 5.3 μ M $^{-1}$ s $^{-1}$	Microscopy (wild-type and E148A)
ADP-monomer off-rate	Barbed end: 7.2 s $^{-1}$ Pointed end: 0.2 s $^{-1}$	64 s $^{-1}$	Microscopy (catastrophe rate of ATP-ParM)
ATP K_d	1.2 nM	42 nM k_- : 0.008 s $^{-1}$ k_+ : 2.32×10^5 M $^{-1}$ s $^{-1}$	ϵ -ATP fluorimetry
ADP K_d	0.3 nM	2.4 μ M k_- : 0.56 s $^{-1}$ k_+ : 1.85×10^5 M $^{-1}$ s $^{-1}$	ϵ -ADP fluorimetry
Hydrolysis rate (estimated)	0.3 s $^{-1}$	0.1 to 0.2 s $^{-1}$	Modeling
Nucleation rate	1 \times	300 \times	Concentration dependence of maximal velocity