

TABLE 4 ATP hydrolysis rate constants (s^{-1}) by polymerized actin calculated assuming random hydrolysis

Report	Mg-ATP-actin	Ca-ATP-actin	Li-ATP-actin
Pardee & Spudich, 1982 (95)		~ 0.0005 ($t_{1/2} = 30$ min.)	
Pollard & Weeds, 1984 (107)	0.07*	0.08	
Carlier et al, 1986 (25)	0.08	0.02	
Pieper & Wegner, 1996 (99)	0.02	0.01	
Blanchoin & Pollard, 2000 (13)	0.10	0.06	0.10

*This was Ca-ATP-actin polymerized in 50 mM KCl, 1 mM $MgCl_2$, 1 mM EGTA. We now know that much of the actin incorporated into polymer was Ca-ATP-actin.