

TABLE 1

Physical Chemical Properties of Various Actins

Source of actin	Monomer molecular weight (daltons)	Reduced viscosity of polymers (dl/g)		Bound nucleotide	Bound divalent cation	<i>N</i> ⁷ -Methylhistidine content
		0.1 M KCl	0.1 M KCl + 1-2 mM MgCl ₂			
<i>Acanthamoeba</i> ^{44,55,1}	45,000	3.9				0.81
Brain (cat, cow or rat) ^{49,50}				0.69		0.3 or 0.9
Brush border (chicken intestine) ³⁸	46,000					
<i>Dictyostelium</i> ⁴³	48,000	3.5	2.7			0.86
Egg (sea urchin) ^{37,74B}		2.1				
		0.8	0.27			
		1.8	0.1 (MgCl ₂ only)			
Fibroblast (chick embryo) ³⁹	45,500					
<i>Physarum</i>	57,000 ¹³			0.79		
	37,000-44,000 ^{15,16}	5.6 ⁵²	0.56			
	45,000 ^{55A}	3.6	3.4	0.71		
					1 Ca ⁺⁺³³	
Platelet (cow) ⁴⁷	45,000					
(human)	44,000		12	1 ⁴²		1
(pig) ⁴⁷	45,000					
Rabbit striated muscle	45,000 ⁵⁴		11.9	1.0	1.1	1.05 ^{55,56-58}
		6.7 ⁵⁹	7.0			

Published molecular weights are cited except for actin from *Acanthamoeba* and cow and pig platelets, which are assigned the molecular weight 45,000 daltons because they coelectrophorese with rabbit actin. The reduced viscosity of *Acanthamoeba* actin was presented in Table 1 of Reference 44; the other reduced viscosities were calculated from the highest measurements of viscosity shown in the respective references. The data for content of nucleotide and *N*⁷-methylhistidine were normalized to the molecular weight 45,000 daltons using data given in the respective references.