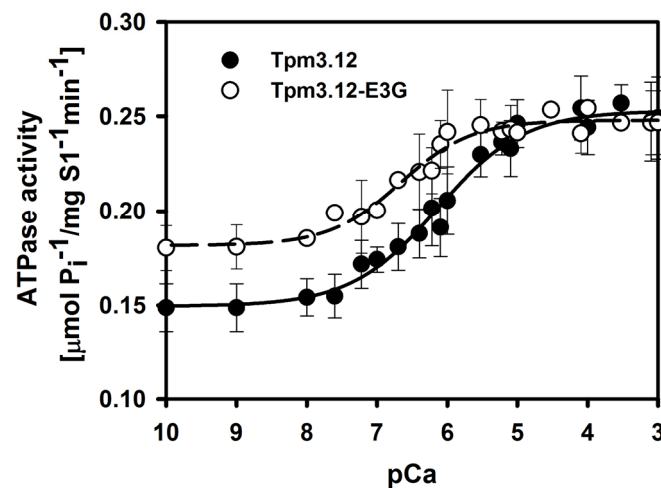


**Supplementary Figure S1.** A) F-actin saturation with Tpm3.12 (dark grey bars) and Tpm3.12-E3G (light grey bars). Conditions of the experiments: 3 μM F-actin, 30 mM NaCl, 2 mM MgCl<sub>2</sub>, 5 mM imidazole, pH 7.0, 1 mM DTT. The bars show average values from three independent experiments ± SE. B) Pellets and supernatants after sedimentation of 2 μM Tpm3.12 (p1, s1) and Tpm3.12-E3G (p2, s2) in 40,000 rpm per 1 hour at 4°C.



**Supplementary Figure S2.** ATPase activity measured as a function of Ca<sup>2+</sup> concentration, at 1 μM Tpm and 1.5 μM Tn. Each point is an average of three independent experiments ± SE. Conditions: 5 μM F-actin, 1 μM S1, 30 mM NaCl, 2 mM MgCl<sub>2</sub>, 5 mM imidazole, pH 7.0, 1 mM DTT.