

Supplementary Table 1. ATPase and microtubule severing activity of structure-guided katanin mutants.

	ATPase (%)	Severing (%)
WT	100.00 ± 4.57	100.00 ± 5.4
Arg351Ala	0.51 ± 0.28	ND
Arg352Ala	5.01 ± 0.22	ND
Asp322Arg	4.03 ± 0.33	ND
Phe469Ala	0.68 ± 0.03	ND

ND, not detectable. Mean ± SEM, N=4.