

Table S1. Spindle severing experiments

Genotype	n	Anterior ( $\mu\text{m}/\text{second}$ )	Posterior ( $\mu\text{m}/\text{second}$ )	Student's <i>t</i> -test versus <i>gpb-1(RNAi)</i>	
				(Anterior)	(Posterior)
Wild type	13	0.64 $\pm$ 0.07*,†	1.03 $\pm$ 0.08*,†	<i>P</i> <0.02	<i>P</i> <0.2
<i>goa-1/gpa16(RNAi)</i>	15	0.21 $\pm$ 0.04‡	0.22 $\pm$ 0.03‡	<i>P</i> <0.001‡	<i>P</i> <0.0011‡
<i>goa-1(sa734)</i>	12	0.60 $\pm$ 0.08*	0.73 $\pm$ 0.09*	<i>P</i> <0.001	<i>P</i> <0.02
<i>goa-1(RNAi)</i>	8	0.50 $\pm$ 0.09	0.80 $\pm$ 0.12	<i>P</i> <0.001	<i>P</i> <0.05
<i>gpa-16(it143)</i>	10	0.58 $\pm$ 0.07	0.65 $\pm$ 0.09	<i>P</i> <0.001	<i>P</i> <0.02
<i>gpa-16(RNAi)</i>	15	0.6 $\pm$ 0.07*	0.65 $\pm$ 0.07*	<i>P</i> <0.001	<i>P</i> <0.001
<i>gpb-1(RNAi)</i>	11	0.96 $\pm$ 0.08*	0.97 $\pm$ 0.23*,§	—	—
<i>goa-1(sa734) gpb-1(RNAi)</i>	11	0.95 $\pm$ 0.087	0.94 $\pm$ 0.11§	<i>P</i> >0.2	<i>P</i> >0.2
<i>goa-1(RNAi) gpb-1(RNAi)</i>	10	0.94 $\pm$ 0.07	0.90 $\pm$ 0.1§	<i>P</i> >0.2	<i>P</i> >0.2
<i>gpa-16(it143) gpb-1(RNAi)</i>	10	1.01 $\pm$ 0.18	1.1 $\pm$ 0.12§	<i>P</i> >0.2	<i>P</i> >0.2
<i>gpa-16(RNAi) gpb-1(RNAi)</i>	11	0.95 $\pm$ 0.13	0.9 $\pm$ 0.13§	<i>P</i> >0.2	<i>P</i> >0.2
<i>goa-1(sa732) gpa-16(RNAi) gpb-1(RNAi)</i>	9	0.18 $\pm$ 0.04	0.22 $\pm$ 0.07	<i>P</i> <0.001	<i>P</i> <0.001

Average peak velocities $\pm$ s.d. were estimated as described in the Materials and methods for the anterior and posterior spindle poles.

\*Afshar et al., 2004.

†The spindle of wild-type embryos (n=9) were severed in this series of experiments, and the values obtained were statistically indistinguishable from those reported in Afshar et al. (*P*>0.2).

‡Colombo et al., 2003.

§The extent of the net pulling forces on the posterior spindle pole are probably underestimated as the mitotic spindle sets up more toward the posterior (see Movies 1-7); as a result, peak velocities on the posterior spindle pole probably cannot be fully developed.