

Supplementary Tables

Table SI. S2 cell mitotic index and metaphase spindle length after RNAi

	Mitotic index	Prophase ^c	Metaphase ^c	Anaphase ^c	Telophase ^c	Spindle length ^d
				%		
Control	12 ^a	5.4	58.1	6.2	30.2	45.6 ± 8.7 (n=25)
KLP3A RNAi	19 ^b	1.04	84.3	0	14.5	35.9 ± 8.7 (n=30) ^e

Fixed cells were stained for DNA and tubulin. By immunofluorescence the number of cells with mitotic figures was scored and each cell's phase was determined. Analysis of KLP3A (RNAi) cells was done in cells that were KLP3A negative by immunostaining.


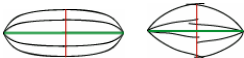

The mitotic index is the percentage of cells in mitosis from total number of cells observed (n^a=1087 and n^b=506).

(c) Percentage of mitotic cells found in each phase.

(d) Metaphase spindle length as a percentage of the cell's diameter (n=the number of metaphase cells).

(e) Metaphase spindle length was obtained only from those spindles with a bipolar morphology and focused poles after KLP3A RNAi.

Table SII. Spindle morphology following KLP3A inhibition

Axial ratio (Y/X)	Antibody inhibition		Dominant negative	
	Control IgG	Anti-KLP3A	Control GST	KLP3A stalk
Metaphase	0.43 ± 0.05	0.54 ± 0.07	0.42 ± 0.06	0.58 ± 0.08
	(25/4)	(26/4)	(29/4)	(35/4)
Anaphase A	0.41 ± 0.05	0.56 ± 0.10	0.39 ± 0.06	0.58 ± 0.06
	(25/4)	(24/4)	(29/4)	(30/4)
Anaphase B	0.30 ± 0.04	0.72 ± 0.14*	0.28 ± 0.03	0.68 ± 0.07*
	(25/4)	(11/5)	(29/4)	(13/4)

Axial ratio is shown as spindle width (Y, red line) divided by spindle length (X, green line) in the cartoon showing spindle morphology (control, left and KLP3A inhibition, right).

Parentheses indicate numbers of spindles and embryos, respectively.

* Because of splayed morphology of spindle MTs following KLP3A inhibition, data were obtained only from spindles with well-defined perimeters.