Supplemental Table S1

GFP enrichment		no drug (%GFP+)	taxol 6nM (%GFP+)
rep #1	vector(1)	28.88	28.47
	shNek4-1(1)	18.16	25.54
	shNek4-2(1)	10.67	19.85
rep #2	vector(2)	29.45	29.46
	shNek4-1(2)	69.26	73.29
	shNek4-2(2)	43.33	47.58
rep #3	vector(3)	20.37	20.83
	shNek4-1(3)	18.76	24.46
	shNek4-2(3)	8.21	14.95
rep #4	vector(4)	42.62	50.08
	shNek4-1(4)	40.88	54.34
	shNek4-2(4)	27.51	62.56

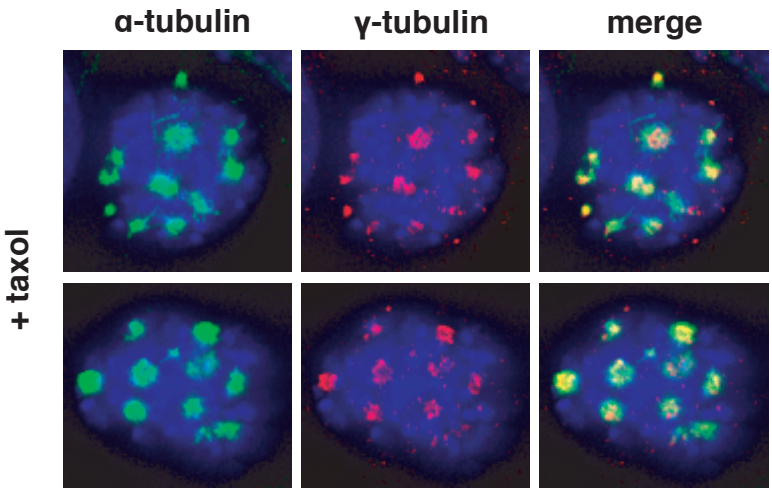
Raw data from the GFP enrichment assay in lymphoma cells. Partially transduced lymphoma cells were treated with 6nM taxol and analyzed by FACS 48h post treatment. Shown are the raw percentages of GFP+ cells that either received drug or remained untreated for the same period of time. Data presented in this table represents four independently transduced and treated populations of cells.

Supplemental Table S2

Viability		rep #1	rep #2	rep #3
tax	vector	0.415	0.572	0.652
	shNek4-1	0.450	0.622	0.750
	shNek4-4	0.475	0.633	0.746
vin	vector	0.703	0.717	0.713
	shNek4-1	0.569	0.520	0.590
	shNek4-4	0.498	0.474	0.565

Raw data from viability assay in Colo669 cells. GFP-sorted (pure population) control, shNek4-1 and shNek4-4 cells were treated with either 5μM taxol (tax) or 5μM vincristine (vin) and analyzed 48 hours post treatment using the CellTiterGlo viability assay. Shown are the relative viability percentages of drug-treated colo669 cells, with or without shRNAs targeting endogenous Nek4. Data presented in this table represents three independently treated populations of cells.

Supplemental Figure S1



Supplemental Figure S1 – Taxol-induced asters contain centrosome-associated gamma-tubulin. Lung adenocarcinoma cells treated with taxol were fixed 4 hours after treatment and subjected to immunofluorescence detection for alpha and gamma-tubulin. Green aster structures (left column) co-stained with antibodies targeting gamma-tubulin. Two representative cells are shown.