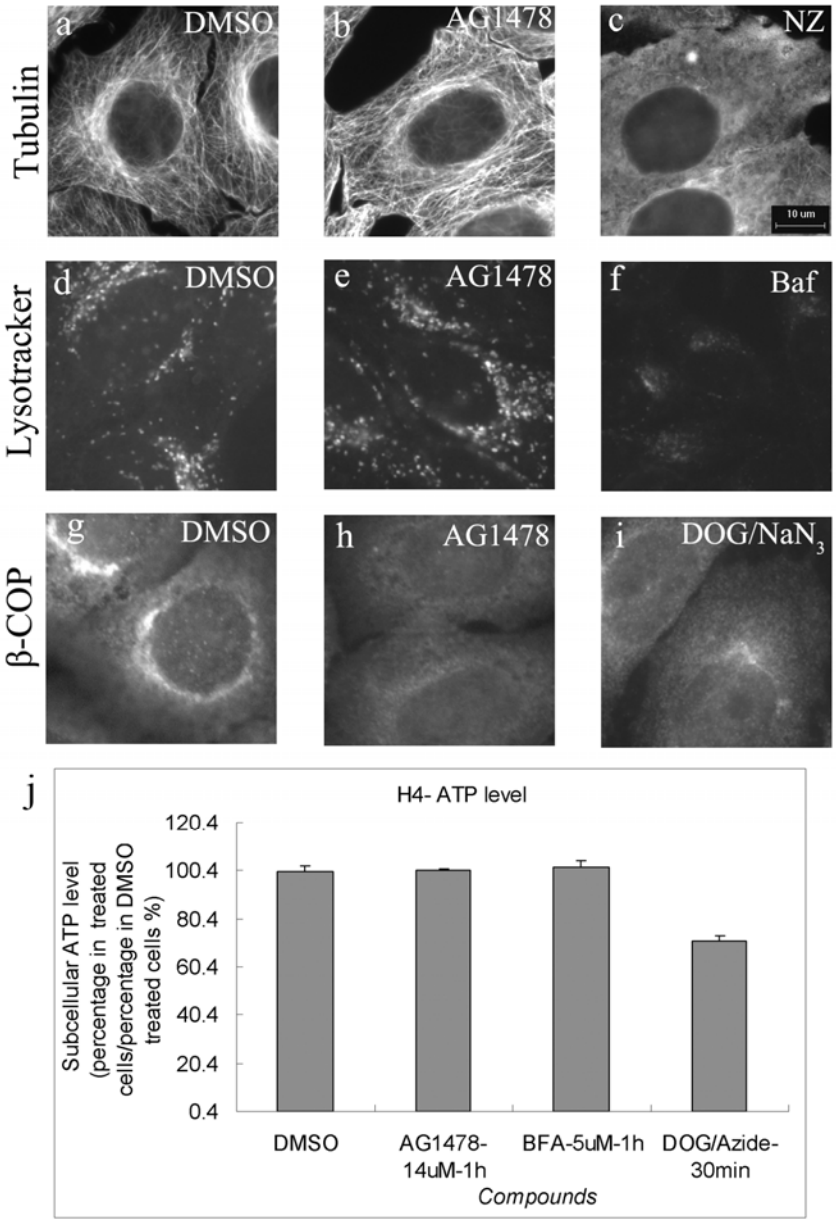
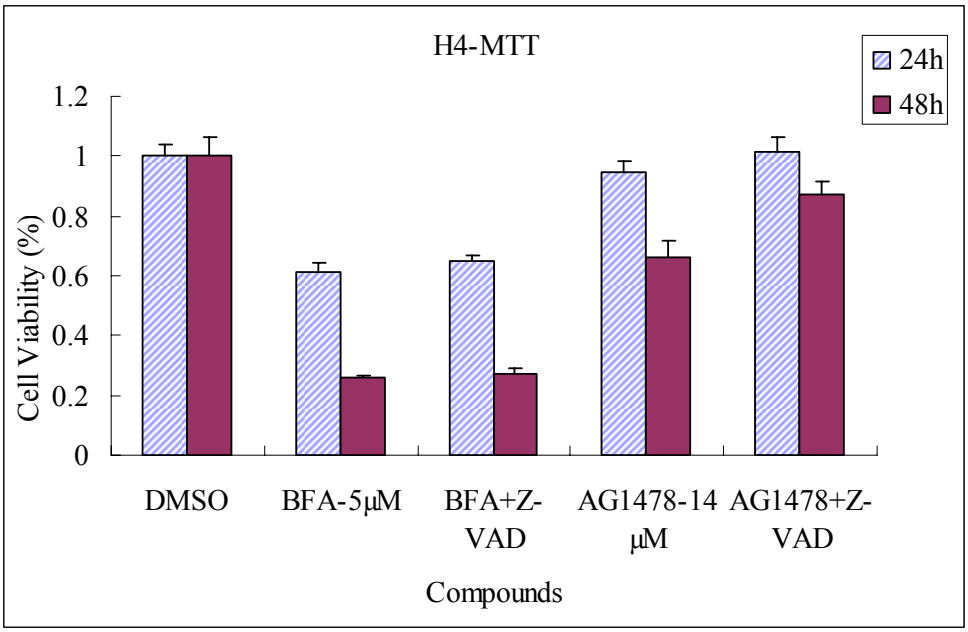
Supplemental Material:

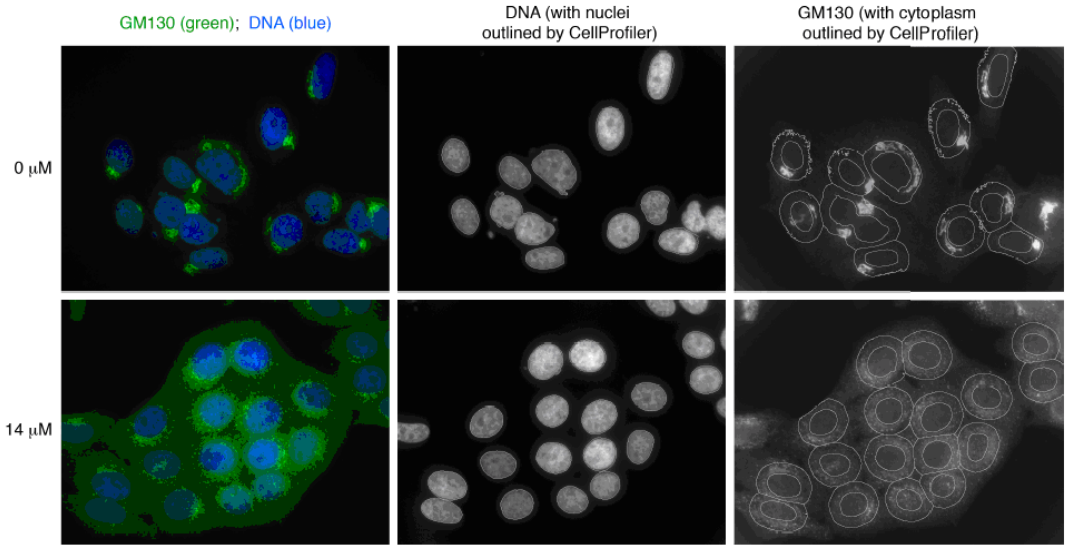
Supplemental Fig. 1 The effect of AG1478 on Tubulin, cellular pH and ATP level. H4 cells were treated with DMSO (a,d,g) for 1 h, or 14 μM AG1478 (b,e,h) for 1 h, or 10 μM Nocodazole (c) for 1 h, or 500 nM Bafilomycin A1 (f) for 1 h, or 50 mM DOG+0.05 %NaN_3 (i) for 30 min. Cells were stained with an antibody against tubulin (a,b,c), or β-COP (g,h,i), or an dye lysotracker (d,e,f). (j) H4 cells were treated with DMSO, AG1478, BFA and DOG/NaN_3 for 30 min and the levels of ATP were determined with Sigma ATP Bioluminescent Assay kit. Bar, 10 μm.



Supplemental Fig. 2 The effect of AG1478 or BFA on cell viability. H4 cells were treated with DMSO, 5 μM BFA, 14 μM AG1478 alone or with z-VAD together as indicated for 24 h or 48 h, performed by MTT assay. Numbers represent viability normalized to that of 0.1% DMSO treated cells.



Supplemental Fig. 3 The example processed images for analysis by Cellprofiler.



Supplemental Table 1. The effect of AG1478 or BFA on Golgi in cell lines

	cell lines	AG1478 (28 μM≈10 μg/ml)	BFA (5 μM)
Human	H4	√	√
	HeLa	√	√
	HepG2	√	√
	A549	√	√
	293T	√	√
	Hs 578Bst	√	√
Mouse	NIH 3T3	×	√
	MEFs	×	√
	B16	×	√
	P19	×	√
	L929	×	√
Rat	NRK	×	√
	Rat2	×	√
	Rat1	×	√
	PC12	×	√
Kangaroo rat	PtK1	×	×
Dog	MDCK	×	×

(“√”represents compounds that have a dispersal effect on Golgi in cell lines; "×" represents compounds that have no dispersal effect on Golgi in cell lines;)