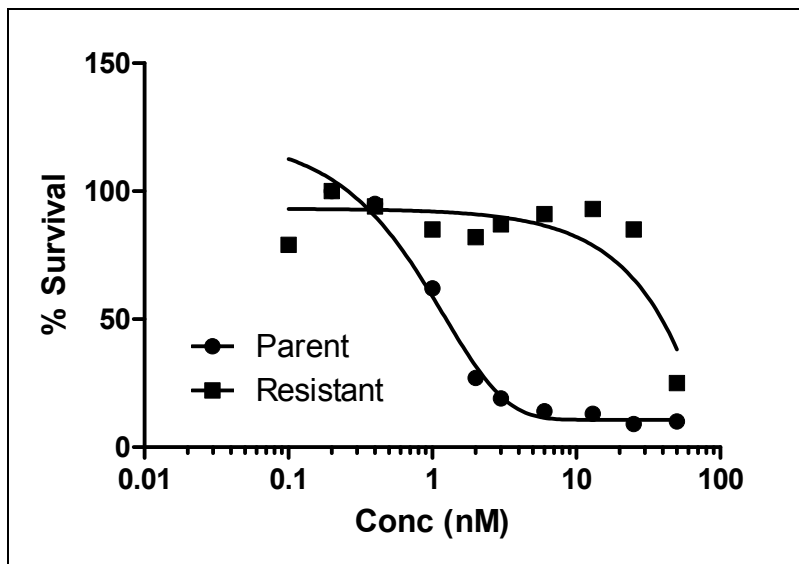


### Supplementary Figure 1:

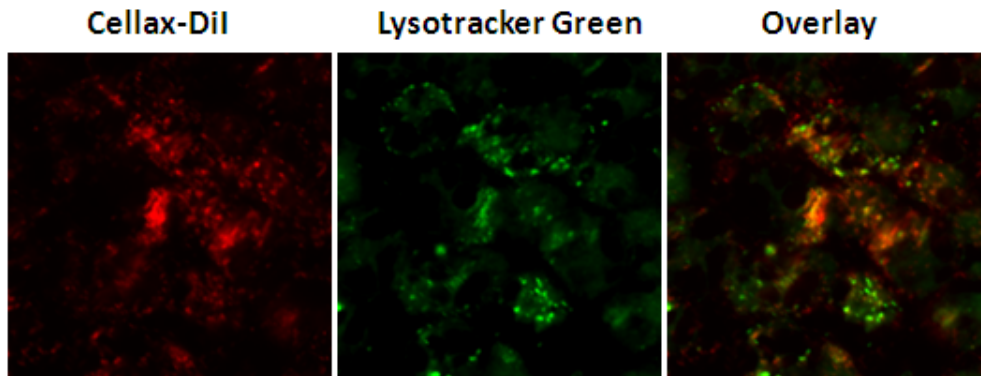
#### Viability assay for the resistant MDA-MB-231 tumor cells:

Five thousand resistant MDA-MB-231 tumor cells per well was plated in a 96 well plate. After 24 h of incubation, cells were treated with different concentrations of DTX. After 72 h of treatment, viability was assayed by the XTT assay. Briefly, a 1 mg/mL solution of XTT reagent and 1.53 mg/mL solution of phenazine methysulfate in water were prepared, and 5  $\mu$ L of phenazine methysulfate was added to each mL of the XTT solution. Twenty-five  $\mu$ L of the mixture solution was added to each well, the culture plates were incubated for 2 h at 37 °C, and absorbance at 480 nm was then measured. Wells treated with media (or 0.1% DMSO media) represent 100% viable cultures, and wells containing no cells represent background signal.



IC50 of DTX was calculated as 1.2 nM against the native cell line and 30 nM against the resistant variety.

**Supplementary Figure 2:**



EMT-6 cells grown on glass coverslips were treated with Cellax particles (500  $\mu\text{g/mL}$  DiI content) and after 4 h of incubation, the cells were washed 2X with PBS and incubated for an additional 1 h with 100 nM LysoTracker green. The cells were rinsed 3X with PBS, mounted on glass slides with glycerol and immediately imaged on a Fluoview Olympus confocal microscope. Magnification = 200X.