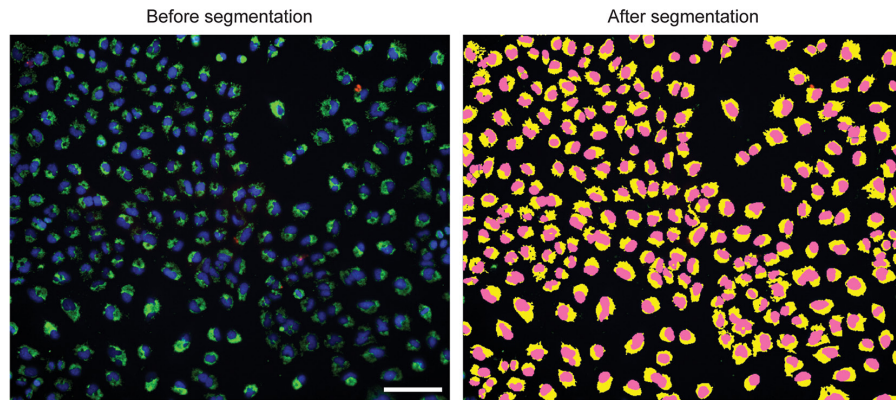
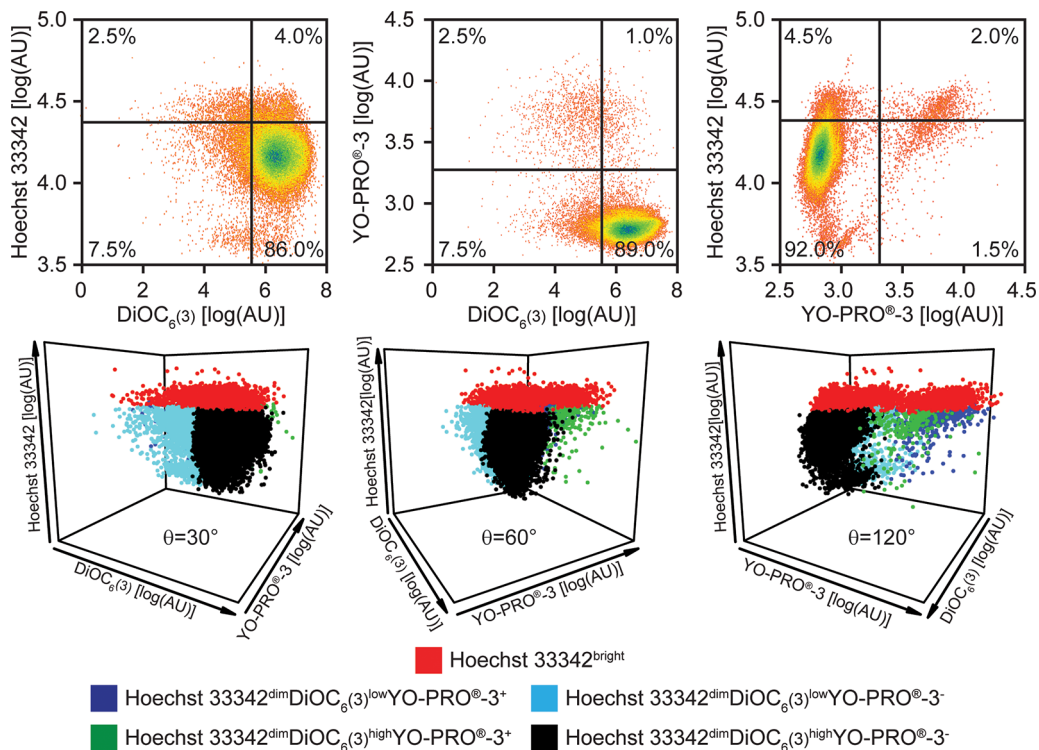


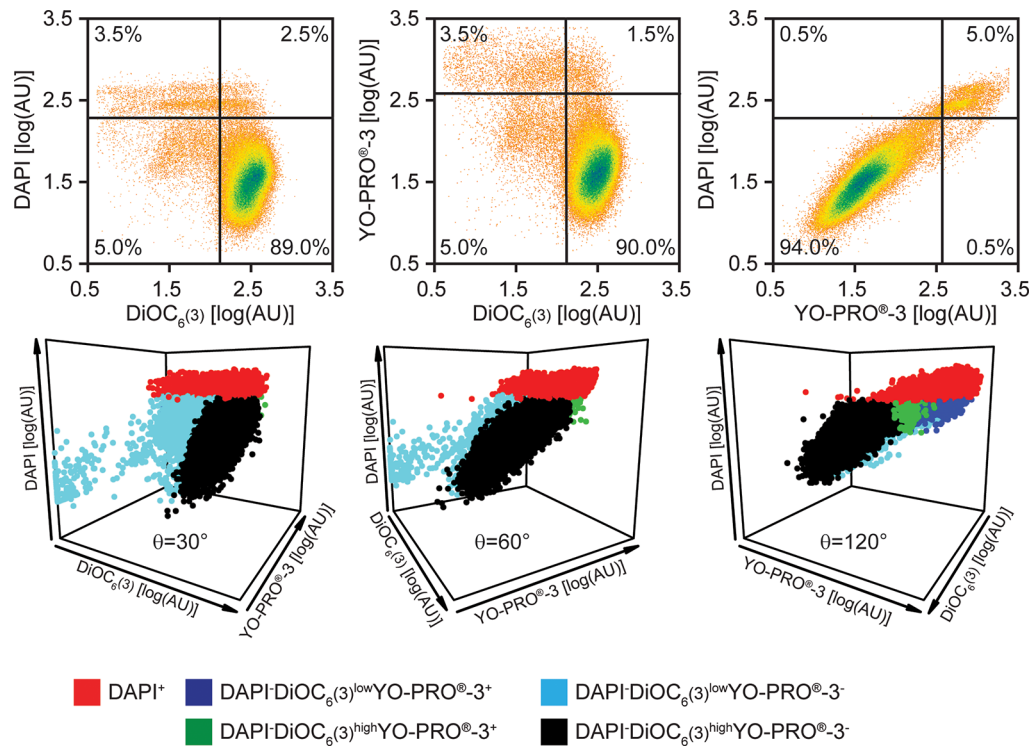
SUPPLEMENTARY FIGURES



**Supplementary Figure 1: Automated image segmentation.** Human non-small cell lung carcinoma A549 cells maintained in control conditions for 24 hrs were fixed, then imaged by epifluorescence microscopy upon co-staining with Hoechst 33342, DiOC<sub>6</sub>(3) and YO-PRO®-3. Representative images before and after segmentation are depicted. Scale bar = 50 μm.



**Supplementary Figure 2: Epifluorescence microscopy-based assessment of cellular viability in response to standard inducers of apoptosis.** Human non-small cell lung carcinoma A549 cells were maintained in control conditions or exposed to 500 μM oxaliplatin or 4 μM staurosporine for 24 hrs, then imaged on epifluorescence microscopy upon co-staining with Hoechst 33342, DiOC<sub>6</sub>(3) and YO-PRO®-3. Dot plots depicting the aggregate analysis of cells maintained in control conditions and exposed to staurosporine or oxaliplatin are reported (upon pooling data from 3 distinct samples).



**Supplementary Figure 3: Flow cytometry-based assessment of cellular viability to standard inducers of apoptosis.** Human non-small cell lung carcinoma A549 cells were cultured in control conditions or treated with 500  $\mu$ M oxaliplatin or 4  $\mu$ M staurosporine for 24 hrs, then co-stained with DAPI, DiOC<sub>6</sub>(3) and YO-PRO<sup>®</sup>-3 and analyzed by flow cytometry. Dot plots depicting the aggregate analysis of cells maintained in control conditions and exposed to staurosporine or oxaliplatin are reported (upon pooling data from 3 distinct samples).