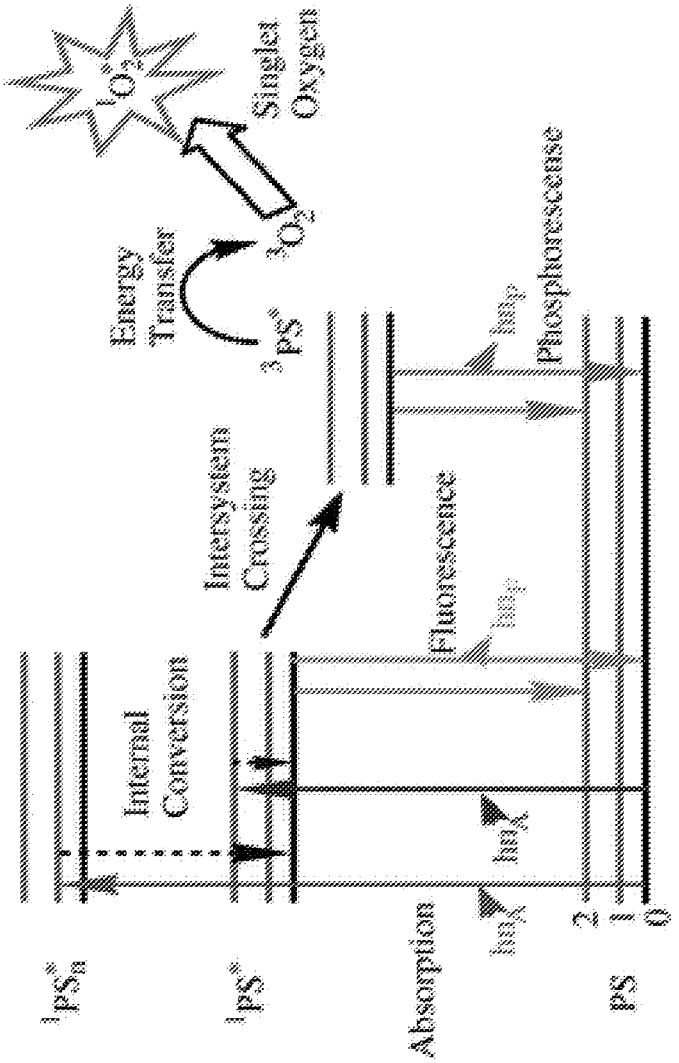


Figure 1: Jablonski diagram showing the formation of singlet oxygen.

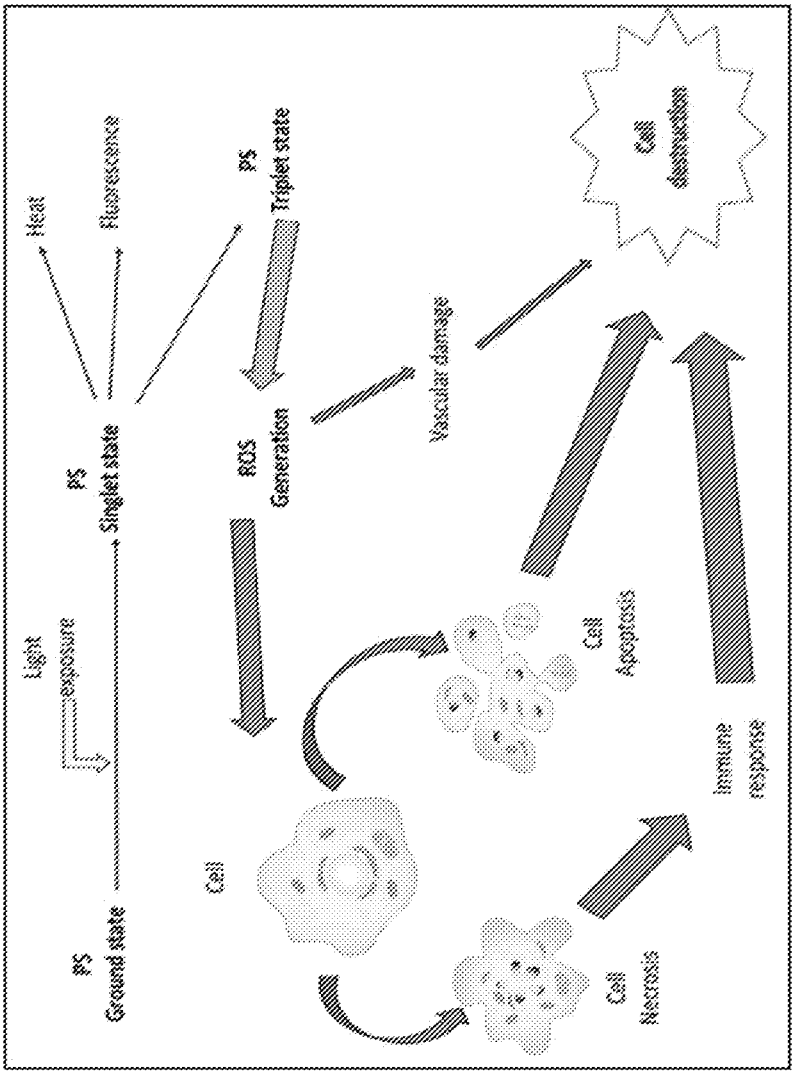


Figure 2: The biological effects of ROS generation.

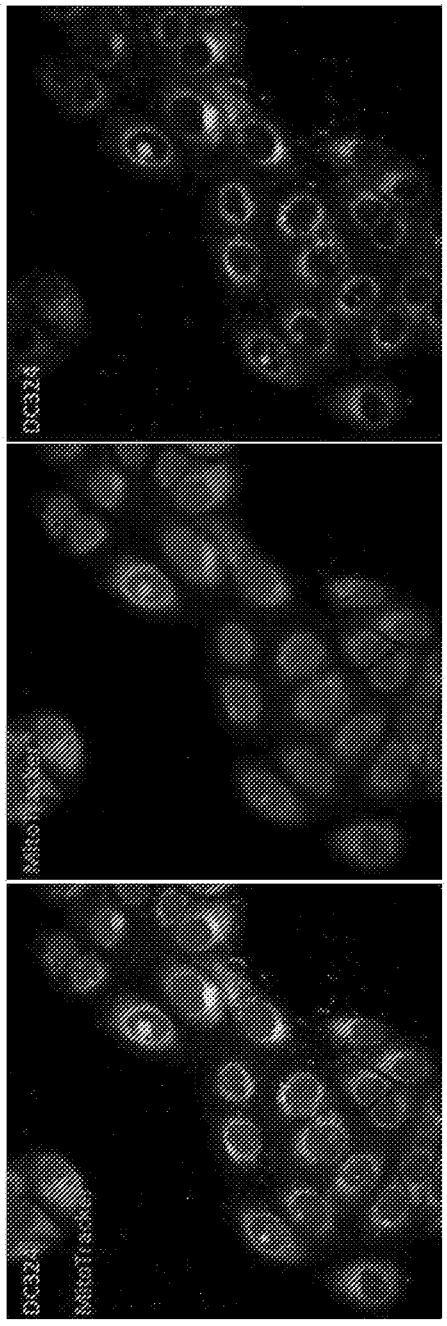


Figure 3: DC324 localised to one side of the nucleus in large patches of cells.

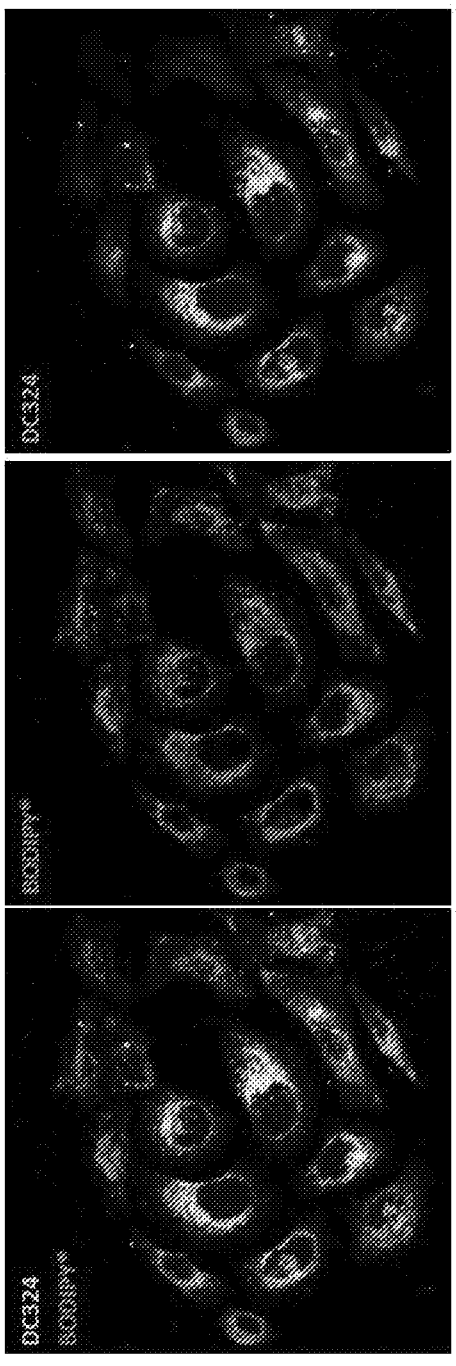


Figure 4: DC324 co-imaged with BODIPY® Golgi stain.

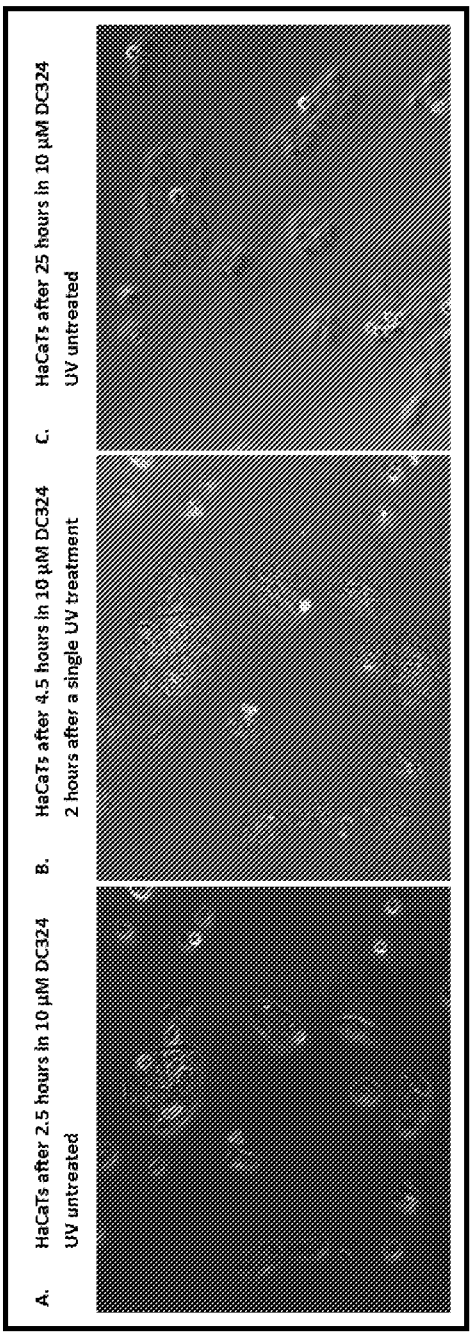


Figure 5: DC324 was the most rapid inducer of cell death.

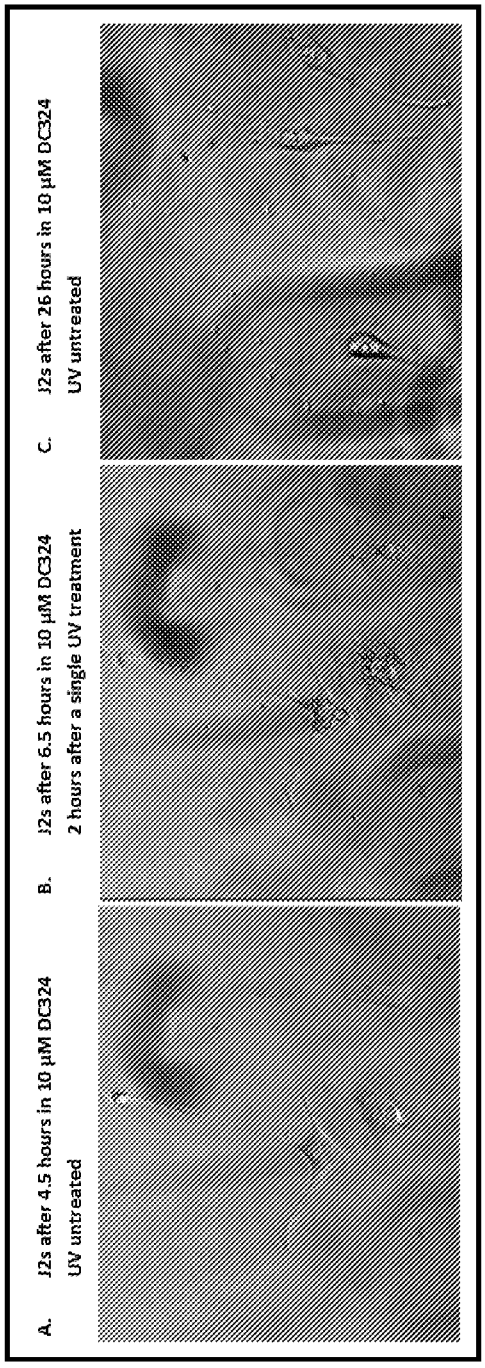


Figure 6: Cell death observations were consistent across different cell lines.

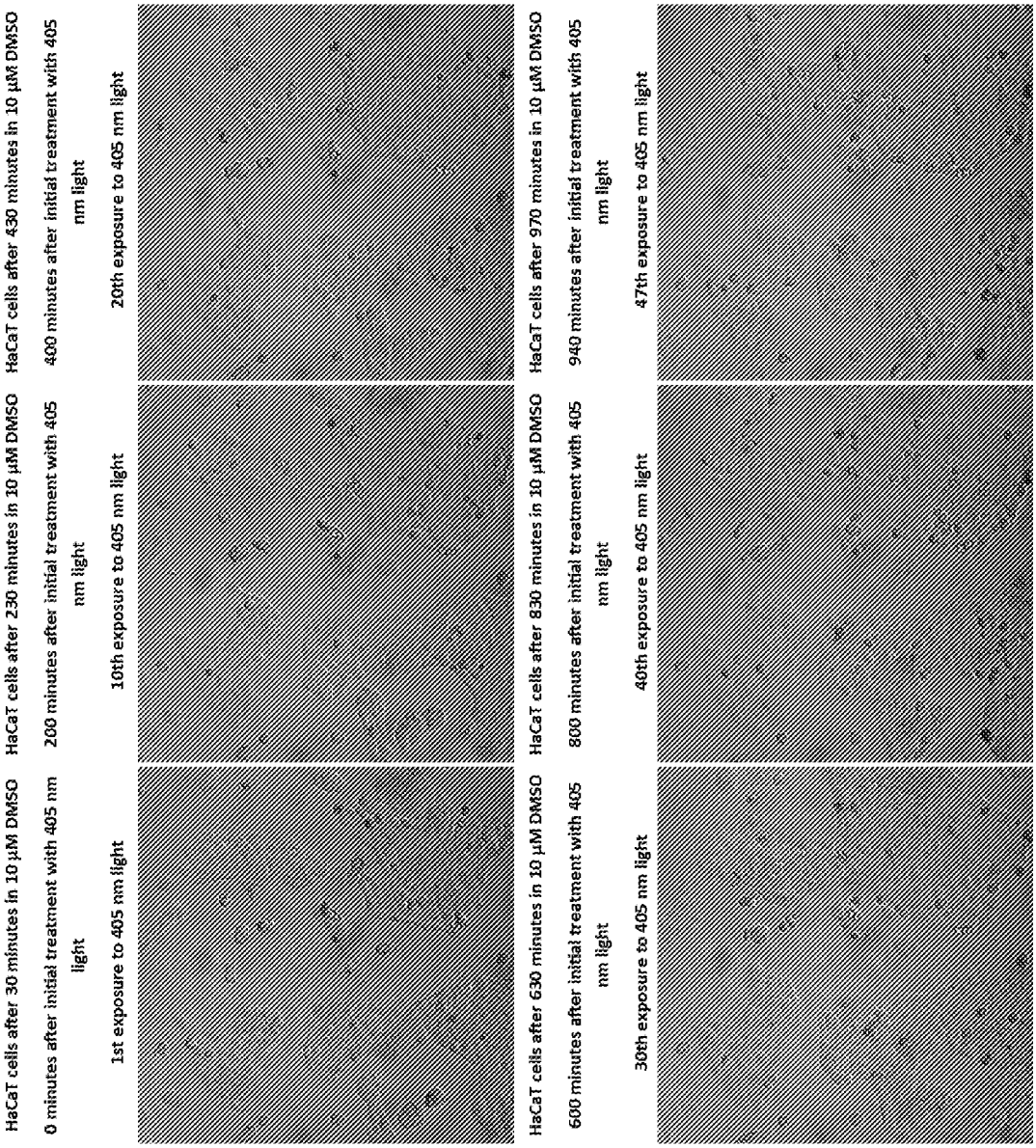


Figure 7: The majority of DMSO treated cells appeared healthy after 47 exposures to 405 nm laser, at 50% strength.

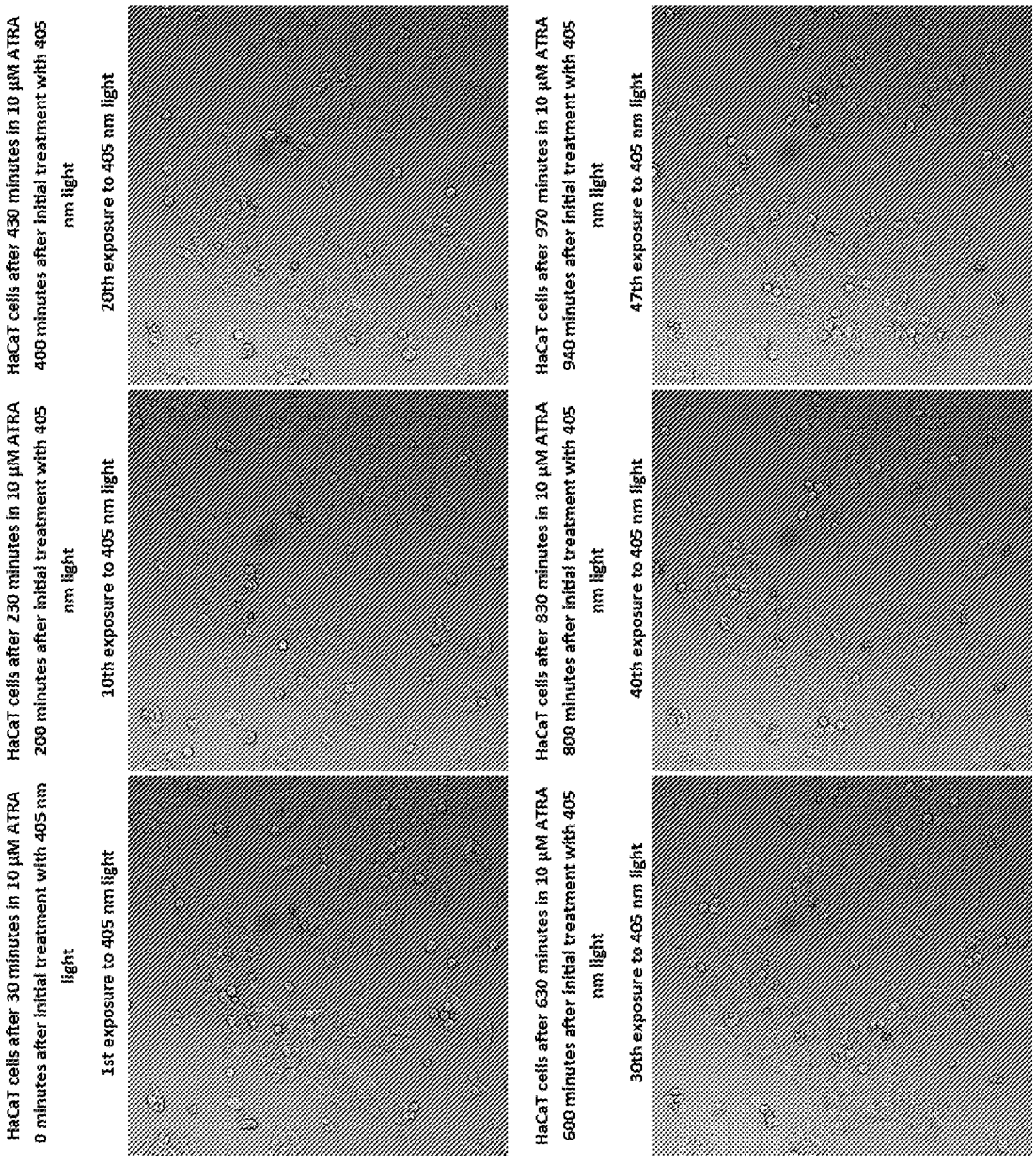


Figure 8: The majority of ATRA treated cells appeared healthy after 47 exposures to 405 nm laser, at 50% strength.

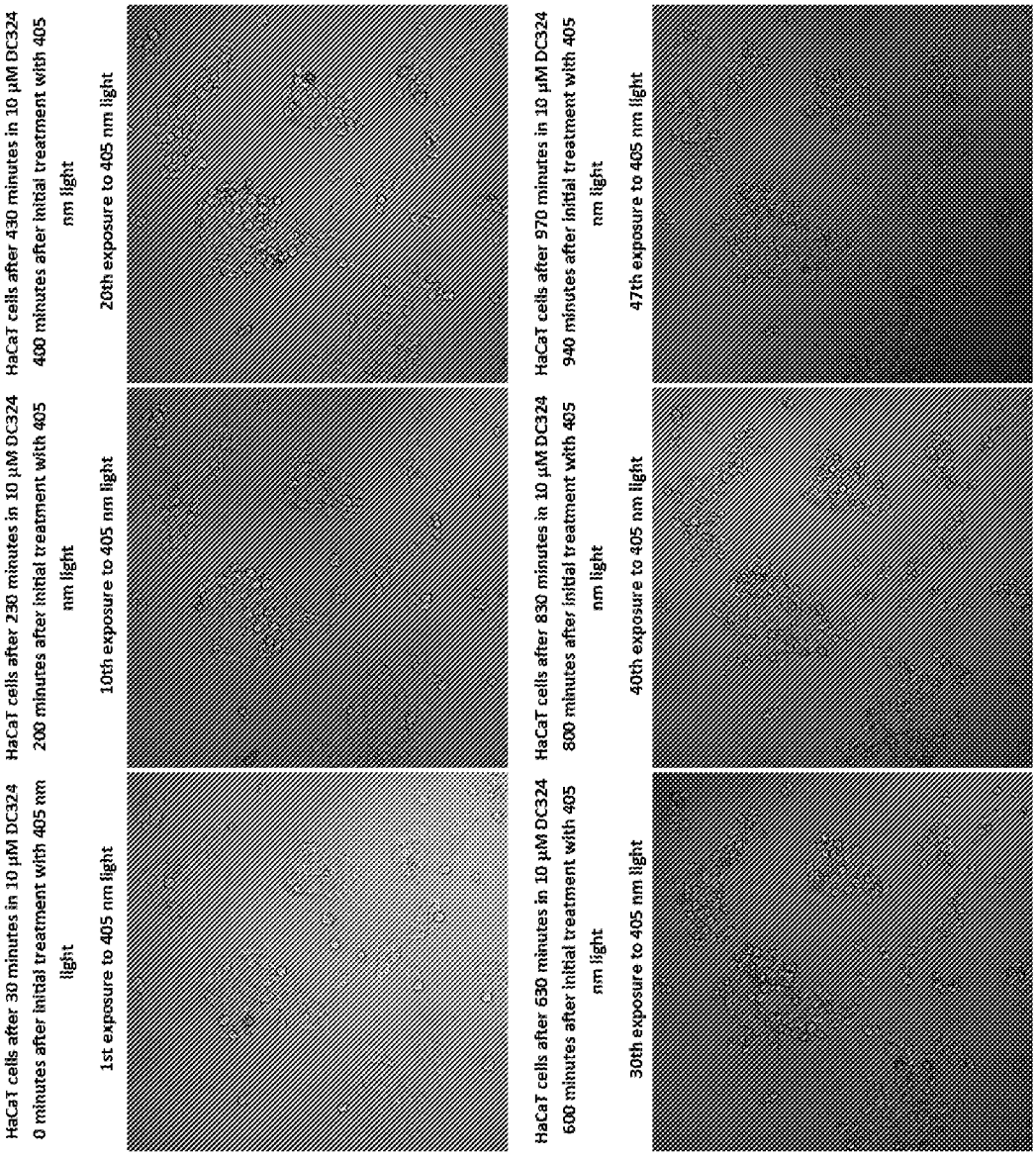


Figure 9: Membrane blebbing was induced in DC324 treated cells by 405 nm laser, at 50% strength.

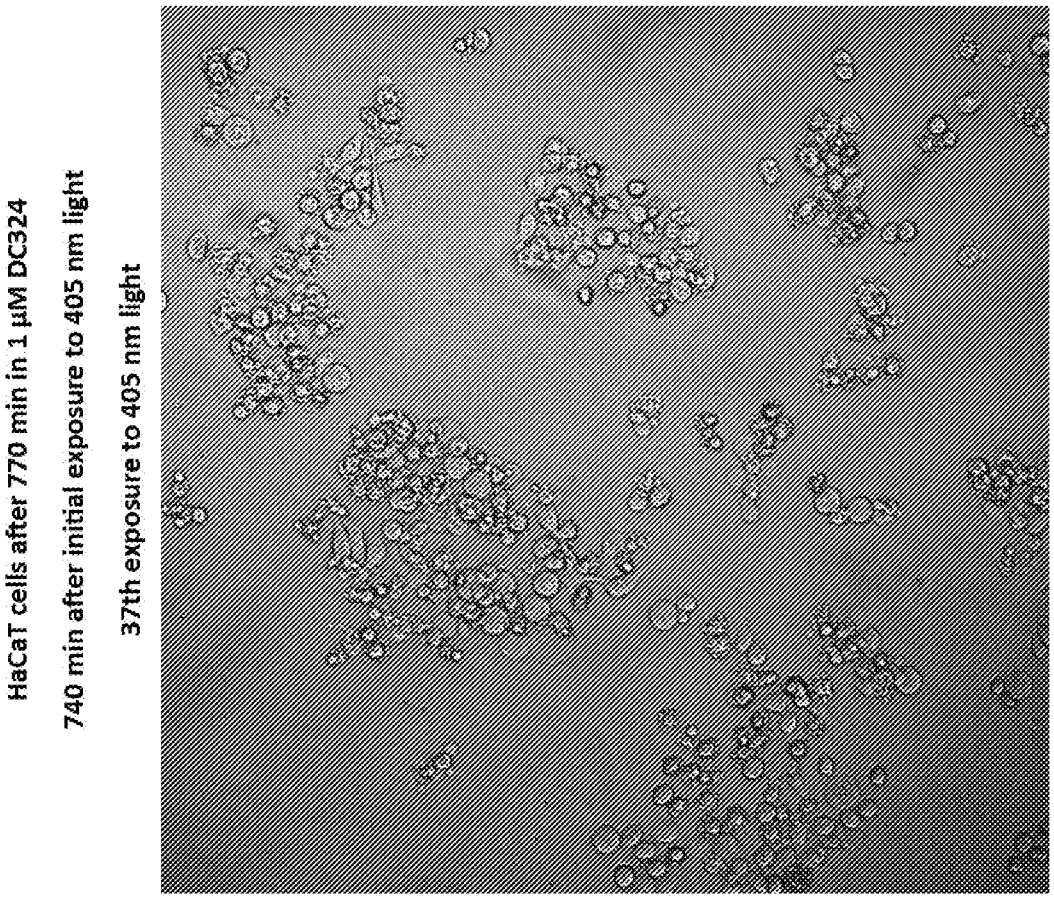


Figure 10: DC324 treated cells putatively producing apoptotic bodies.

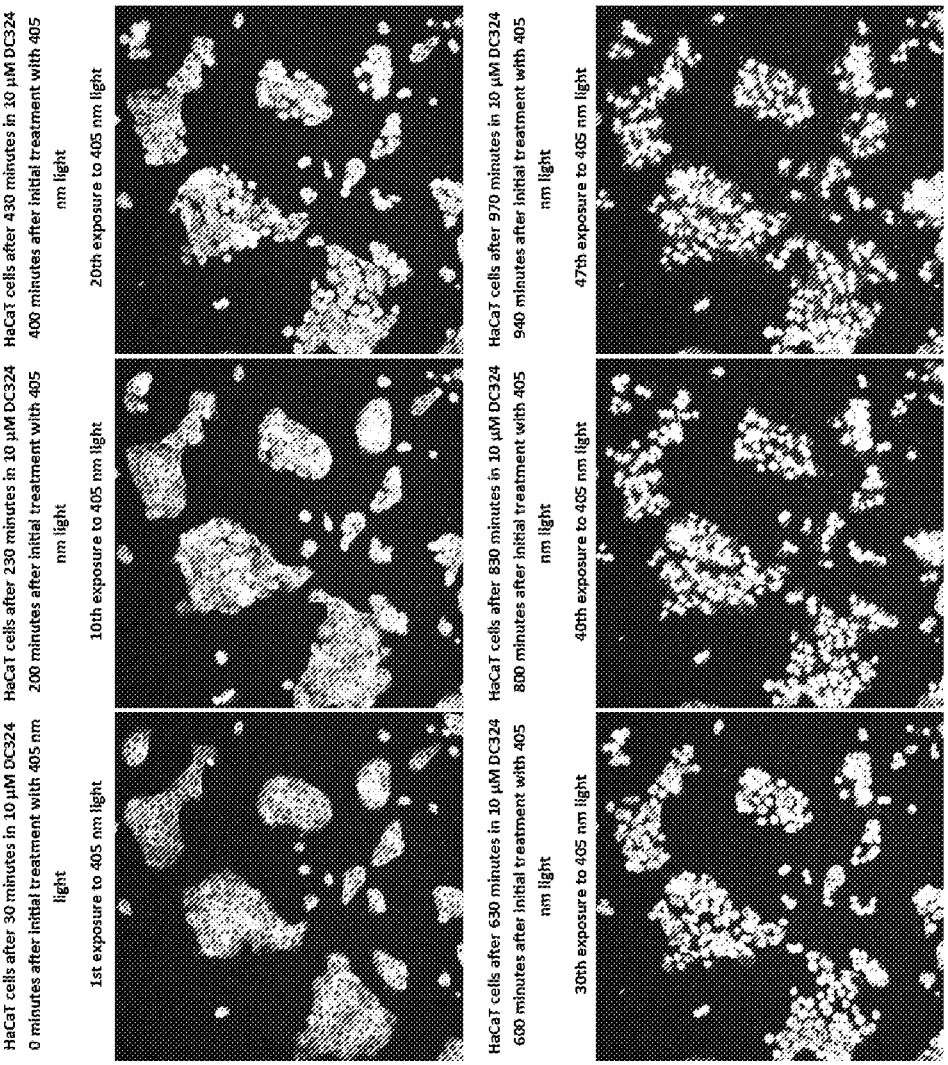


Figure 11: DC324 fluorescence from treated HaCaT cells, imaged with 405 nm laser light, at 50% strength.

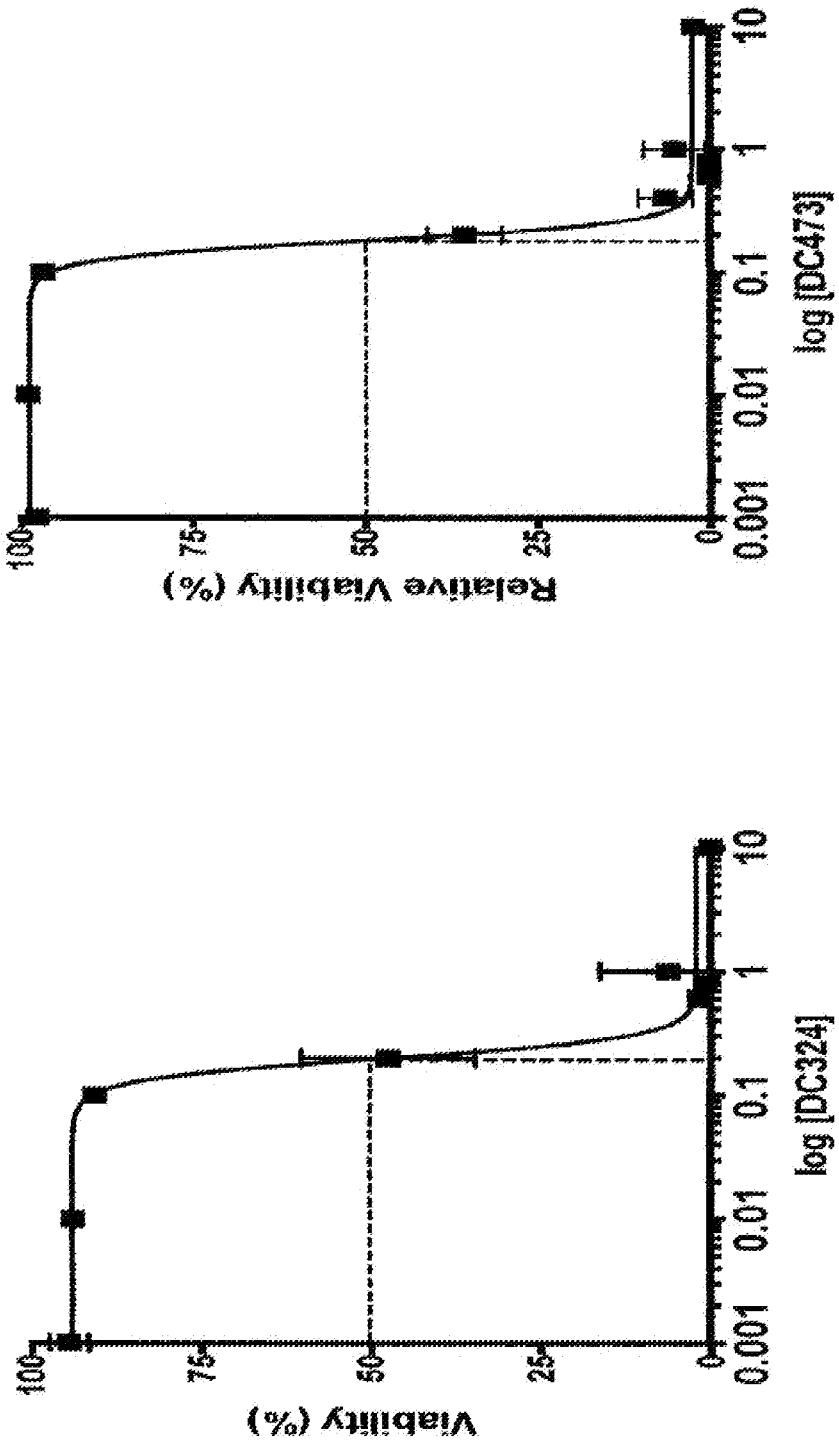


Figure 12: The dose-dependent response of HaCaT cells treated with DC324 and DC473and 10 seconds of UV.

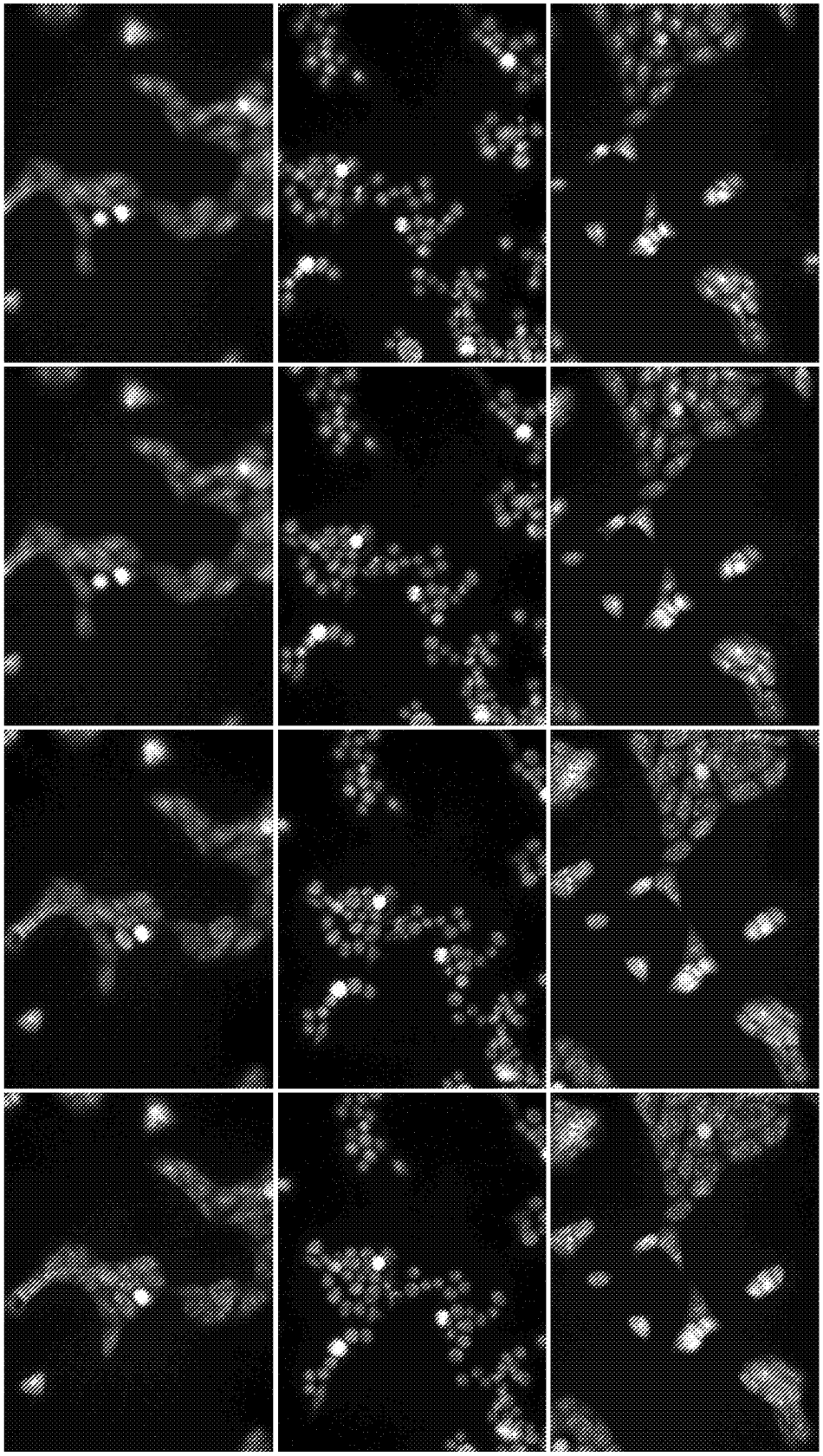


Figure 13: Control treatments stained for superoxide after exposure to UV.

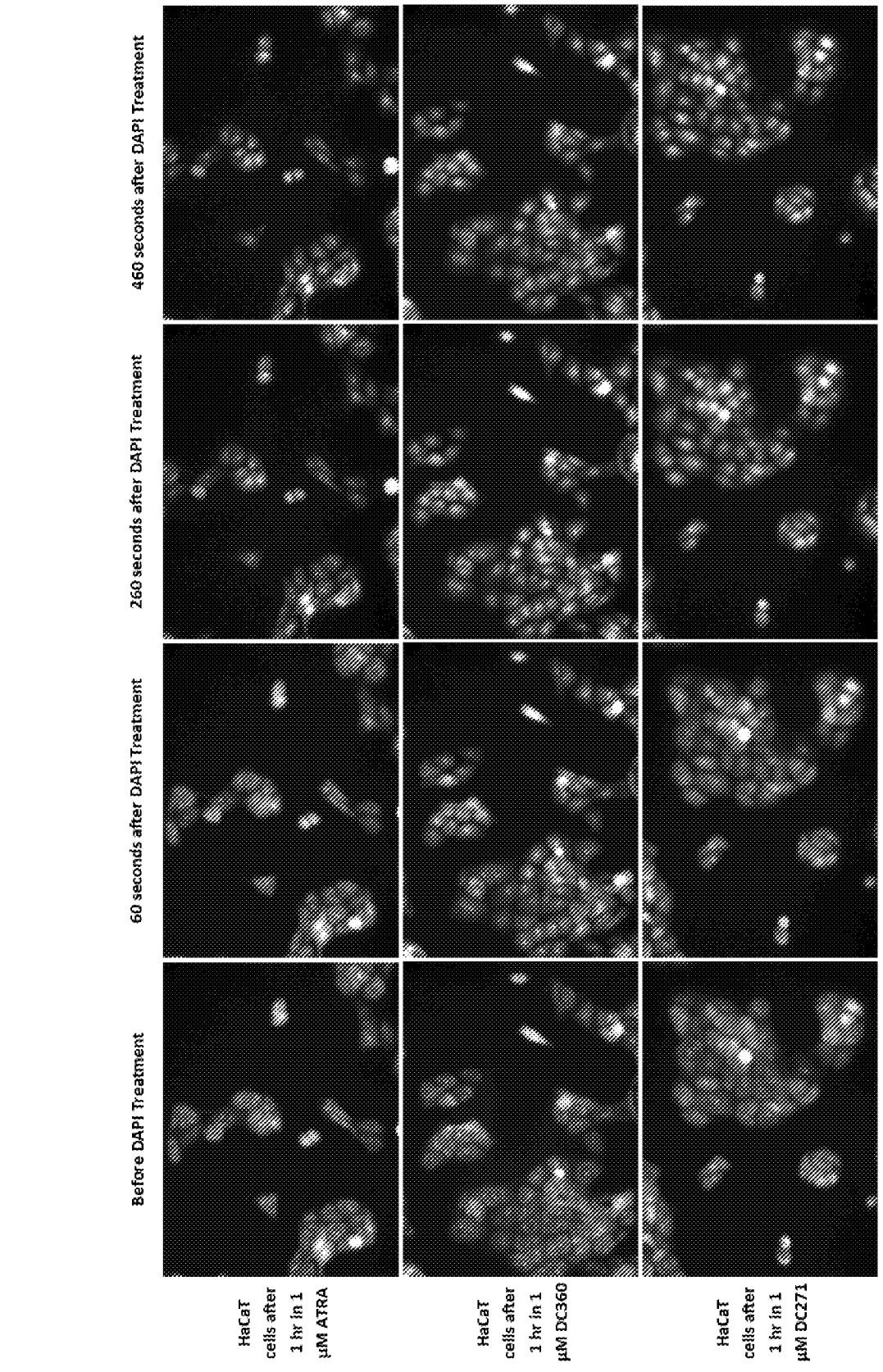


Figure 14: Active compounds stained for superoxide after exposure to DAPI.

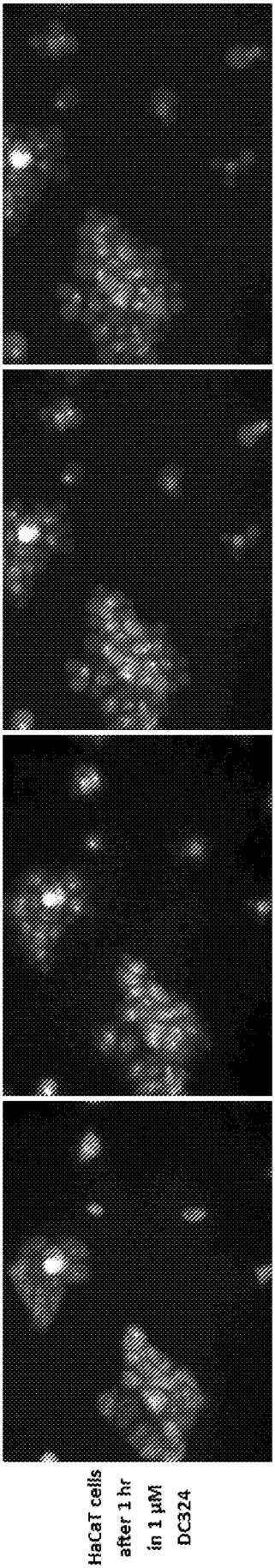


Figure 15: Inactive DC324 compound treated cells stained for superoxide after UV exposure.

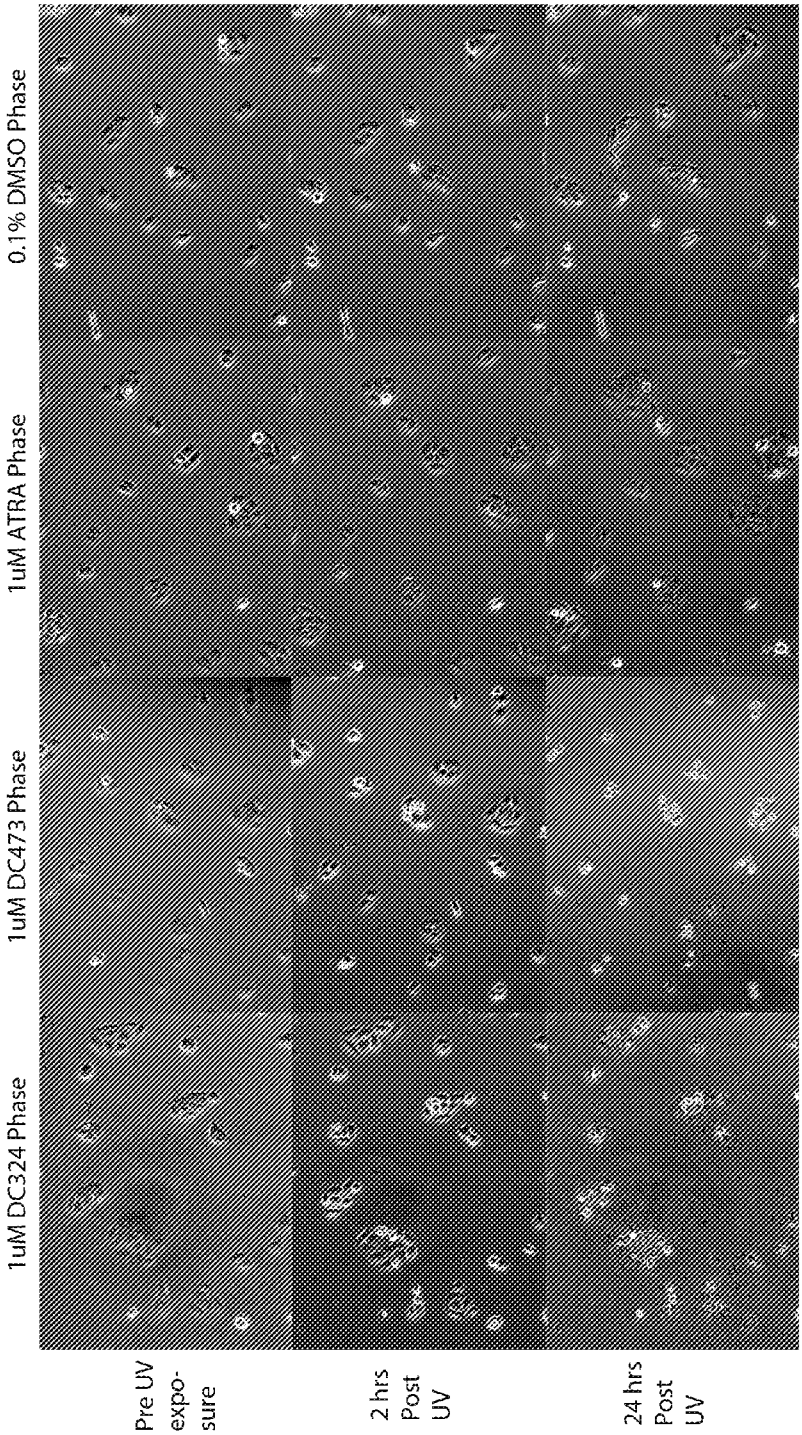


Figure 16: DC473 compound treated cells after 2 hours and 24 hours UV exposure.

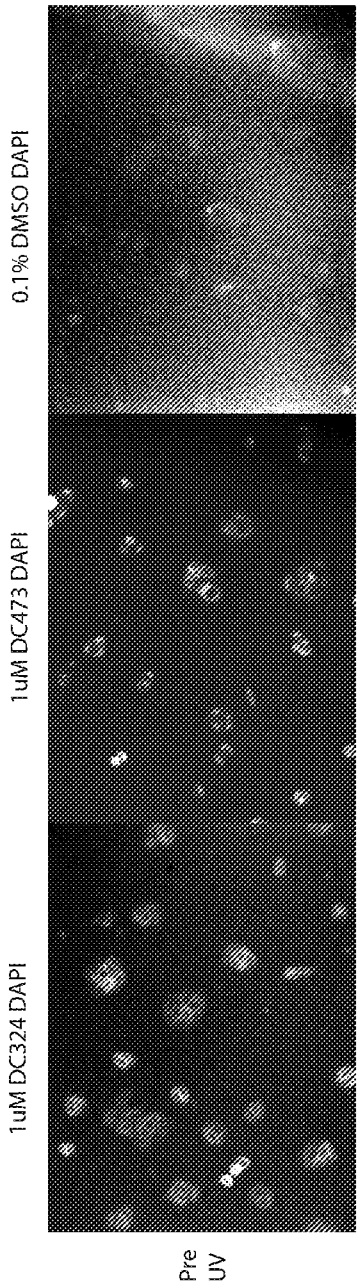


Figure 17: Comparison of DC324 and DC473 compound treated cells.

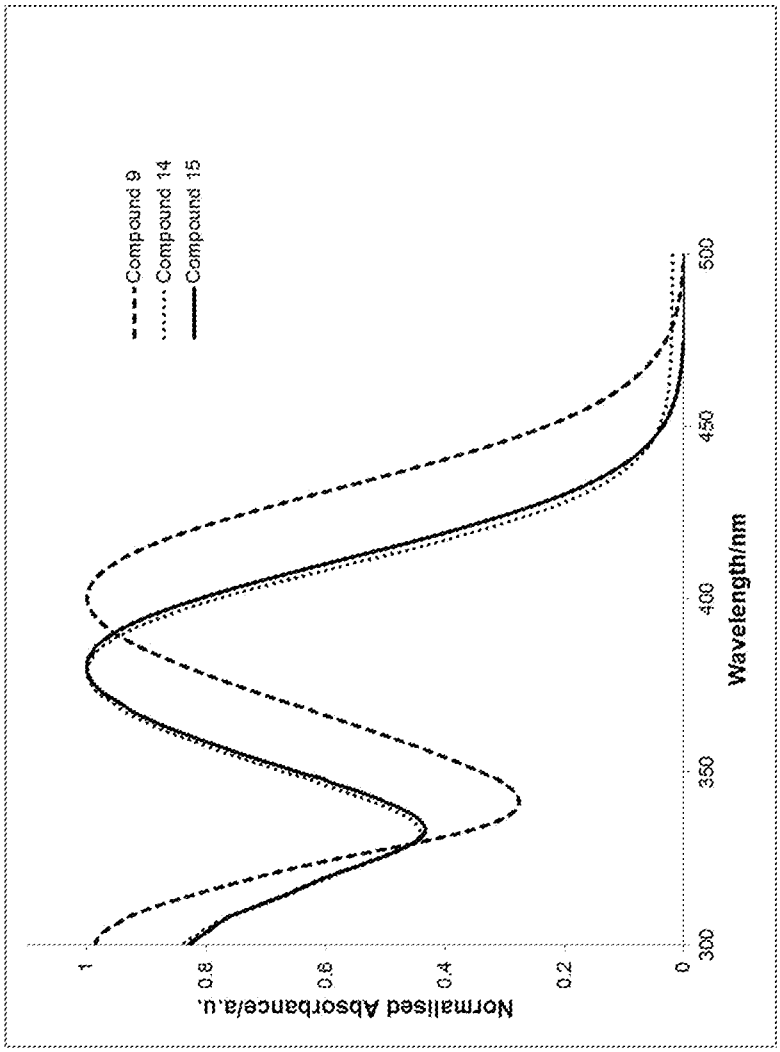


Figure 18: Normalised absorbance spectra of compounds **9** (DC324), **14** (DC473) and **15** (DC474) in $CHCl_3$ (10 μM).

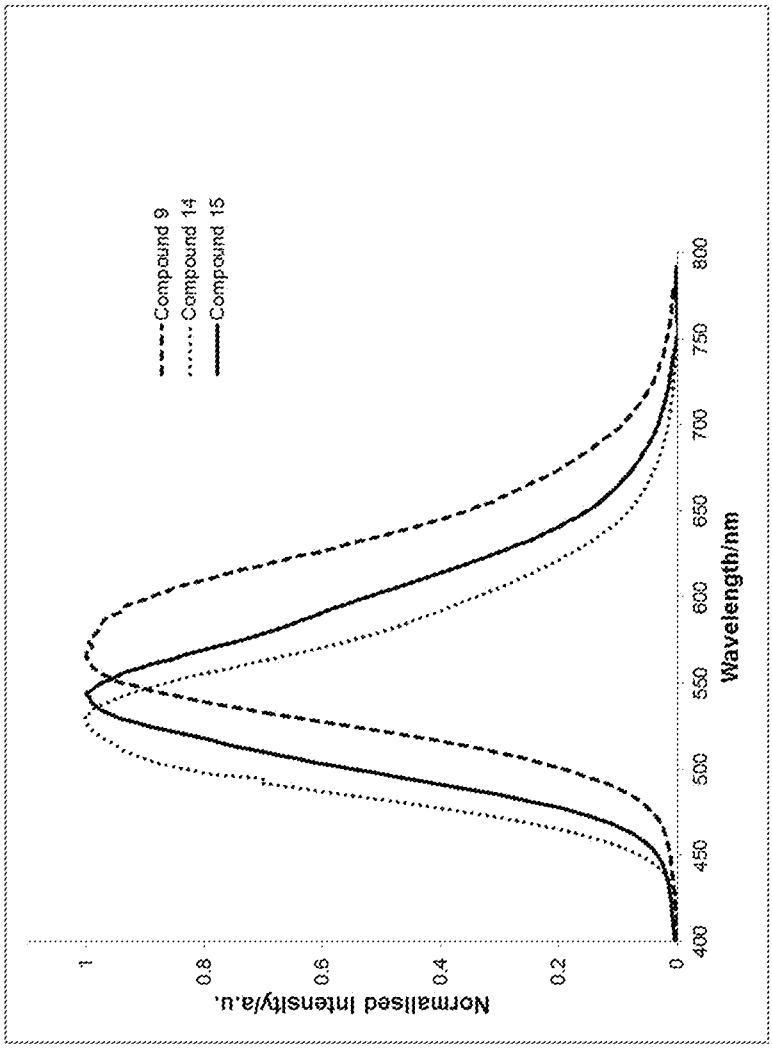


Figure 19: Normalised emission spectra of compounds **9** (DC324), **14** (DC473) and **15** (DC474) in $CHCl_3$ (100 nM), with excitation at their respective maximal absorption wavelengths.

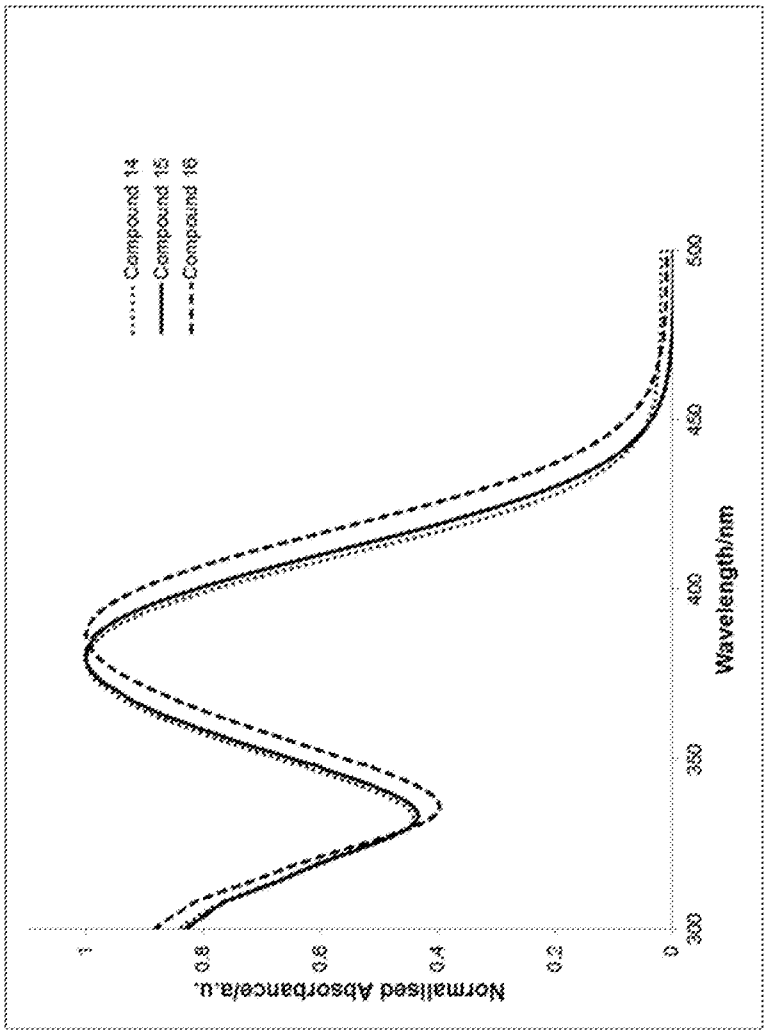


Figure 20: Normalised absorbance spectra of compounds **14** (DC473), **15** (DC474) and **16** in $CHCl_3$ (10 μM).

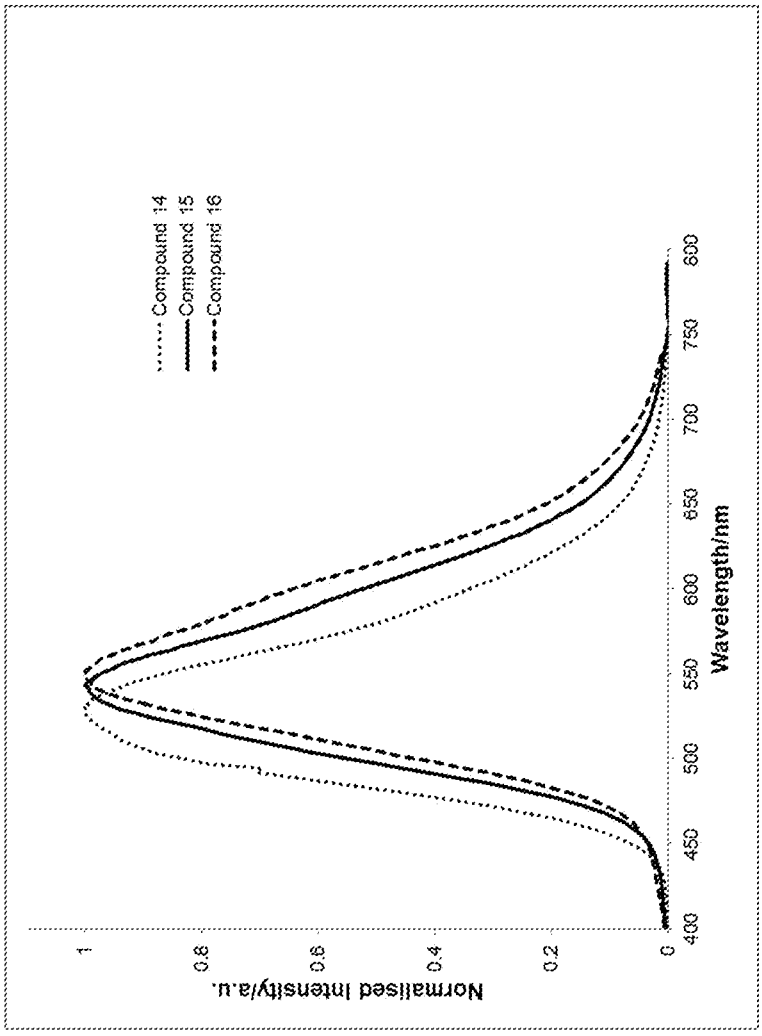


Figure 21: Normalised emission spectra of compounds **14** (DC473), **15** (DC474) and **16** in $CHCl_3$ (100 nM), with excitation at their respective maximal absorption wavelengths.