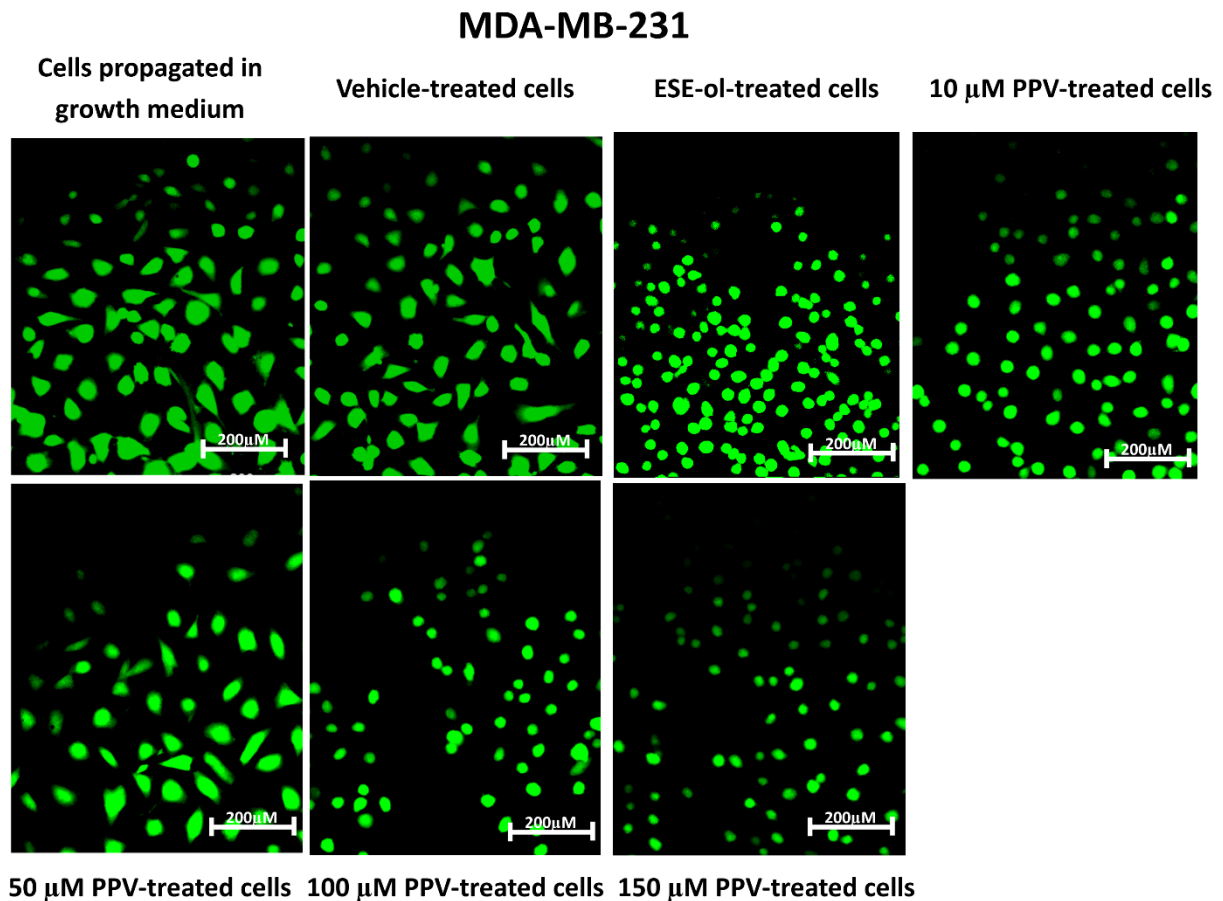
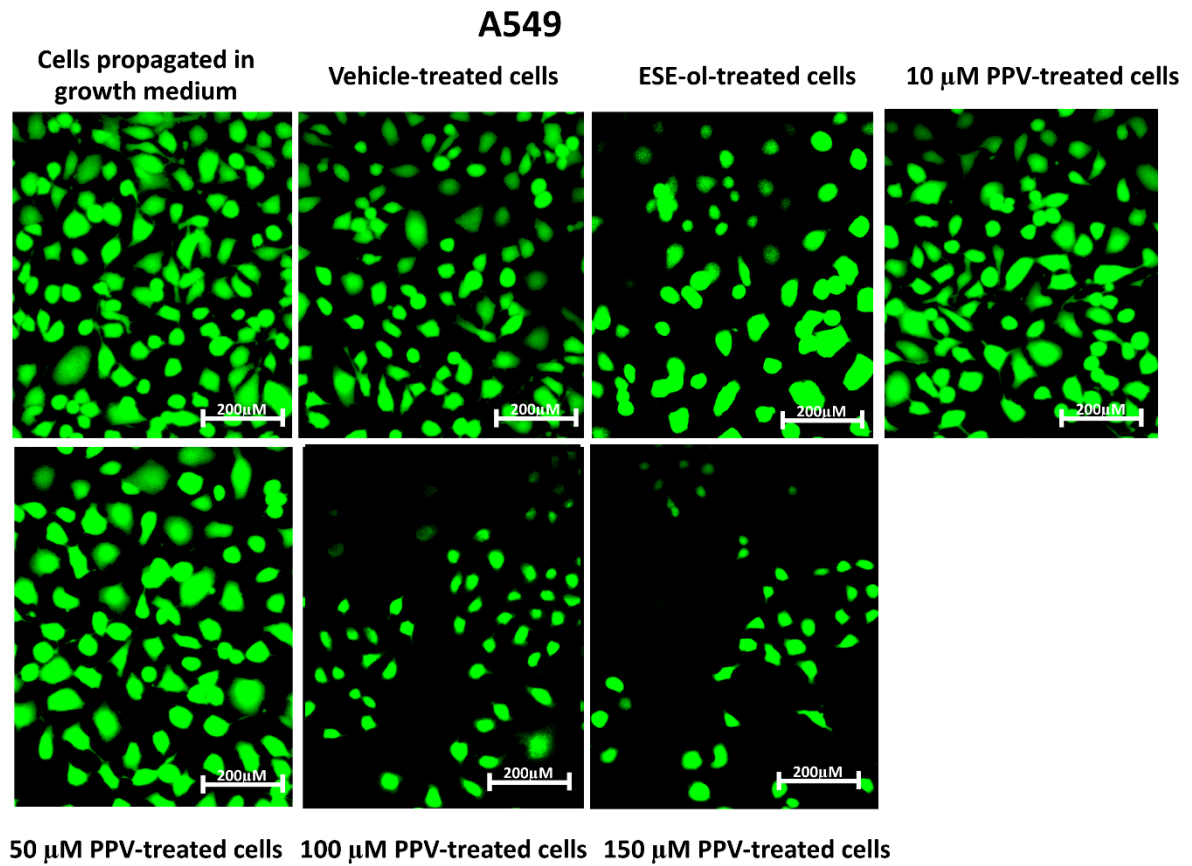


Table S1: table displaying the effects of papaverine on oxidative stress as a change of fluorescence intensity relative to the fluorescence intensity of cells propagated in growth medium on MDA-MB-231 cells compared to A549- and DU145 cell lines at 48 h. Statistical significance is represented by an \* when using the student *t*-test with a *P* value of 0.05 compared to cells propagated in growth medium

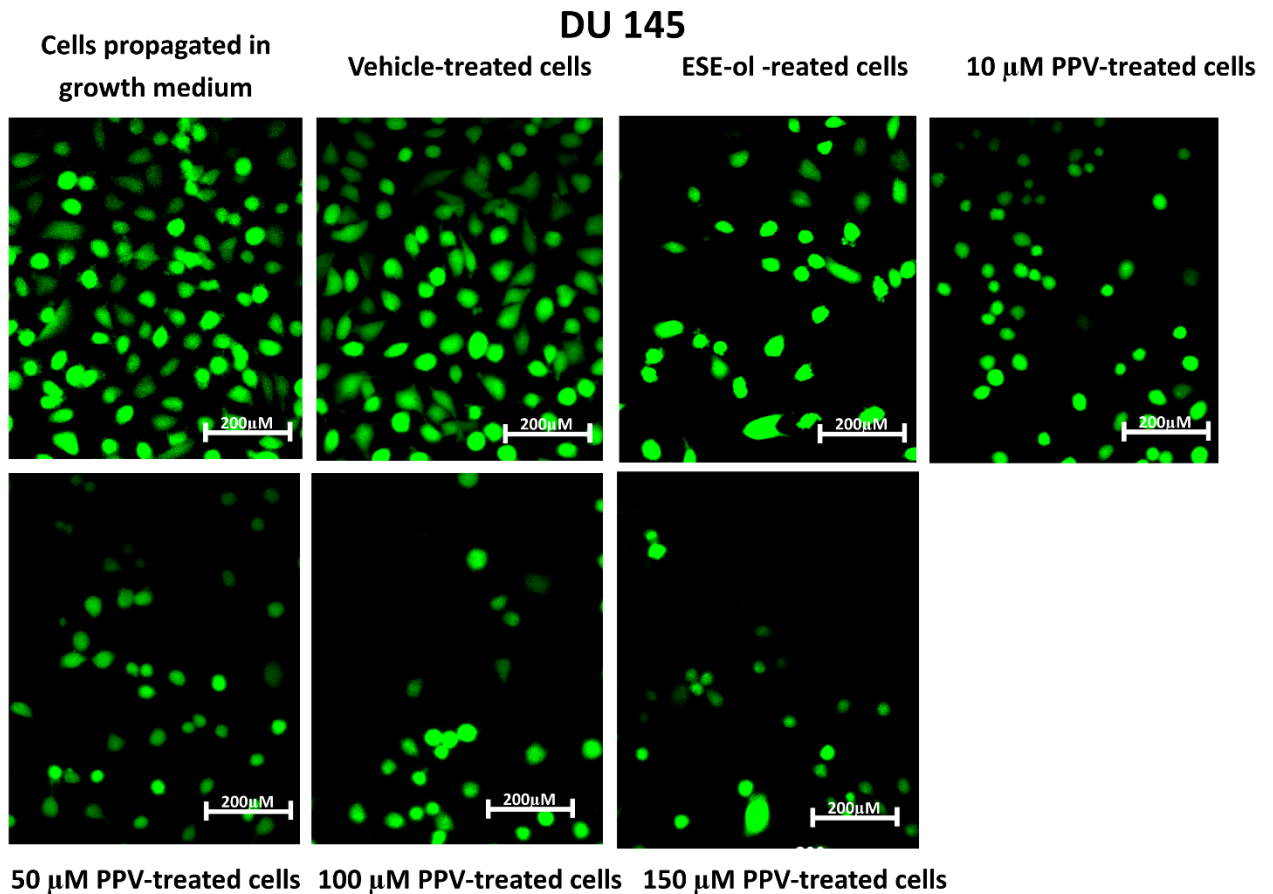
Cell line	Vehicle-treated cells	10 $\mu$ M PPV-treated cells	50 $\mu$ M PPV-treated cells	100 $\mu$ M PPV-treated cells	150 $\mu$ M PPV-treated cells	ESE-ol-treated cells
<b>MDA-MB-231</b>	1.00 $\pm$ 0.04	1.05 $\pm$ 0.07	0.91 $\pm$ 0.1	1.07 $\pm$ 0.08	1.11 $\pm$ 0.10	1.91 $\pm$ 0.04*
<b>A549</b>	0.95 $\pm$ 0.04	1.09 $\pm$ 0.08*	1.23 $\pm$ 0.06*	1.18 $\pm$ 0.06*	1.14 $\pm$ 0.04*	1.94 $\pm$ 0.04*
<b>DU 145</b>	1.00 $\pm$ 0.02*	0.92 $\pm$ 0.02*	0.90 $\pm$ 0.07	0.96 $\pm$ 0.04	0.99 $\pm$ 0.04	1.78 $\pm$ 0.06*



**Figure S1.** Fluorescence staining showing H<sub>2</sub>O<sub>2</sub> production in MDA-MB-231 cells after 48 h. Fluorescence microscopy images of DCFDA staining demonstrating the effects of PPV (10-150  $\mu$ M) on the fluorescent intensity on MDA-MB-231 cells at 48 h at a magnification of x20. A scale bar of 200 $\mu$ M is included.



**Figure S2.** Fluorescence staining showing  $H_2O_2$  production in A549 cells after 48 h. Fluorescence microscopy images of DCFDA staining demonstrating the effects of PPV (10-150  $\mu$ M) on the fluorescent intensity on A549 cells at 48 h at a magnification of  $\times 20$ . A scale bar of 200 $\mu$ M is included.

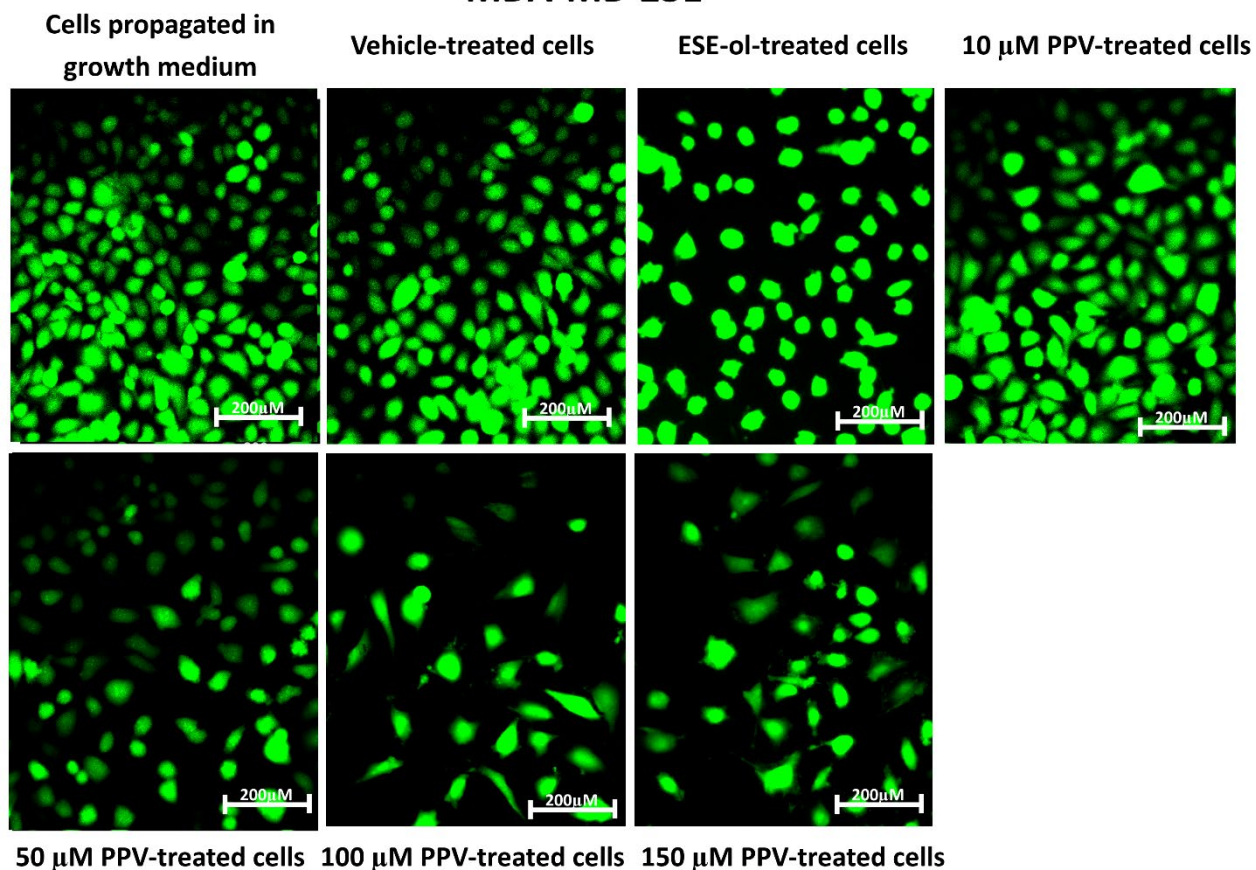


**Figure S3.** Fluorescence staining showing  $H_2O_2$  production in DU145 cells after 48 h. Fluorescence microscopy images of DCFDA staining demonstrating the effects of PPV (10-150  $\mu$ M) on the fluorescent intensity on DU145 cells at 48 h at a magnification of x20. A scale bar of 200 $\mu$ M is included.

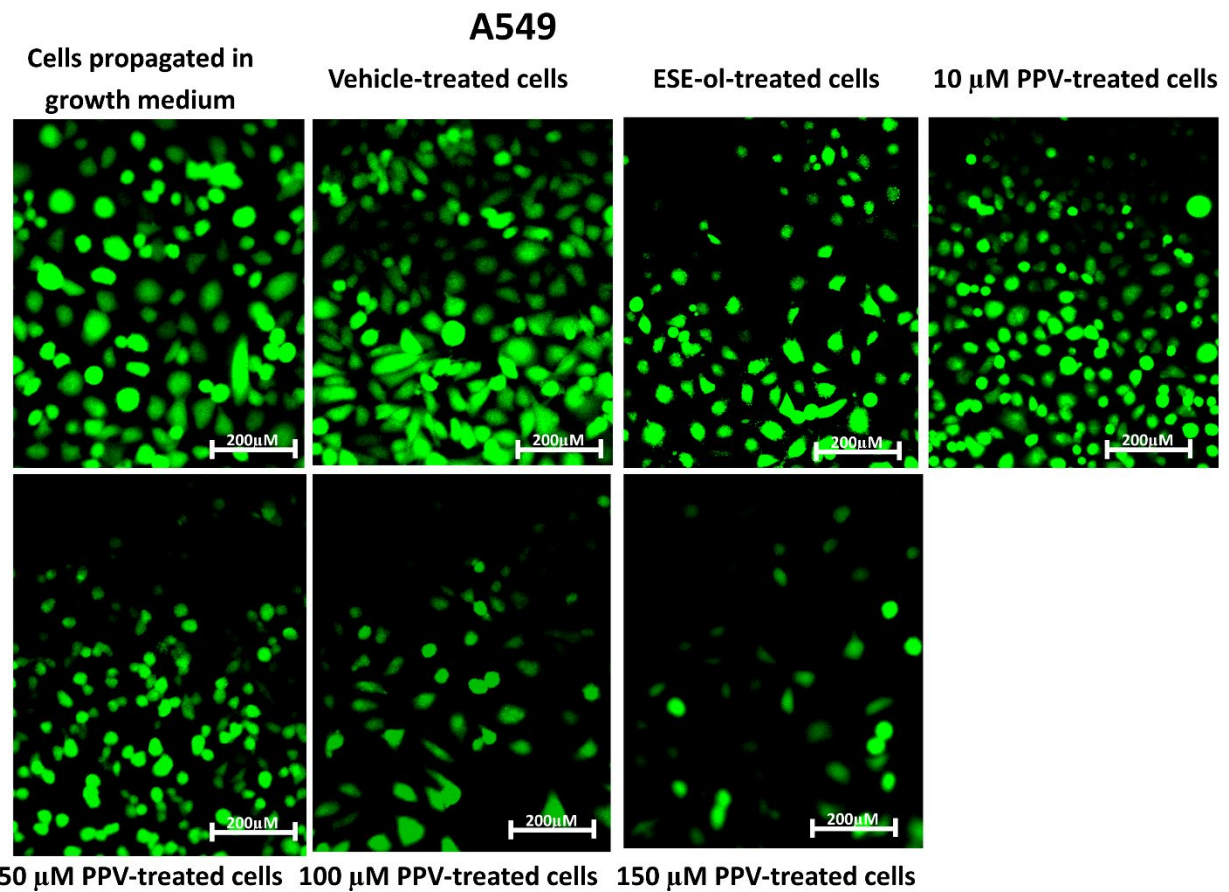
Table S2: table displaying the effects of papaverine on oxidative stress as a change of fluorescence intensity relative to the fluorescence intensity of cells propagated in growth medium on MDA-MB-231 cells compared to A549- and DU145 cell lines at 72 h. Statistical significance is represented by an \* when using the student *t*-test with a *P* value of 0.05 compared to cells propagated in growth medium.

Cell line	Vehicle-treated cells	10 $\mu$ M PPV-treated cells	50 $\mu$ M PPV-treated cells	100 $\mu$ M PPV-treated cells	150 $\mu$ M PPV-treated cells	ESE-ol-treated cells
<b>MDA-MB-231</b>	0.97 $\pm$ 0.00*	1.04 $\pm$ 0.04	0.73 $\pm$ 0.02*	0.83 $\pm$ 0.03*	0.84 $\pm$ 0.01*	1.95 $\pm$ 0.02*
<b>A549</b>	0.98 $\pm$ 0.02	1.02 $\pm$ 0.03	0.92 $\pm$ 0.03*	0.75 $\pm$ 0.04*	0.69 $\pm$ 0.03*	1.94 $\pm$ 0.03*
<b>DU 145</b>	0.99 $\pm$ 0.01	1.44 $\pm$ 0.02*	1.05 $\pm$ 0.05	1.14 $\pm$ 0.04*	1.15 $\pm$ 0.02*	1.83 $\pm$ 0.03*

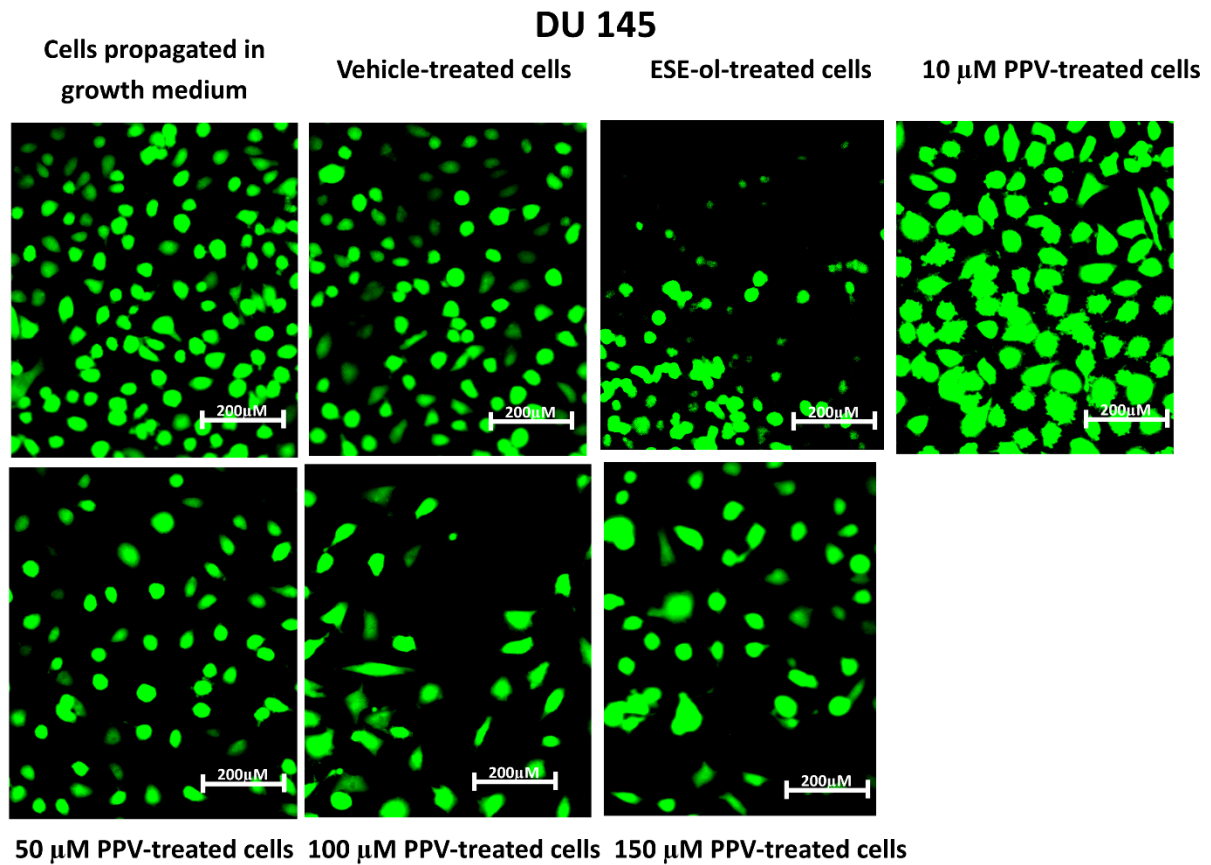
## MDA-MB-231



**Figure S4.** Fluorescence staining showing  $H_2O_2$  production in MDA-MB-231 cells after 72 h. Fluorescence microscopy images of DCFDA staining demonstrating the effects of PPV (10-150  $\mu$ M) on the fluorescent intensity on MDA-MB-231 cells at 72 h at a magnification of x20. A scale bar of 200  $\mu$ M is included.



**Figure S5.** Fluorescence staining showing  $H_2O_2$  production in A549 cells after 72 h. Fluorescence microscopy images of DCFDA staining demonstrating the effects of PPV (10-150  $\mu$ M) on the fluorescent intensity on A549 cells at 72 h at a magnification of  $\times 20$ . A scale bar of 200 $\mu$ M is included.



**Figure S6.** Fluorescence staining showing  $\text{H}_2\text{O}_2$  production in DU145 cells after 72 h. Fluorescence microscopy images of DCFDA staining demonstrating the effects of PPV (10-150  $\mu\text{M}$ ) on the fluorescent intensity on DU145 cells at 72 h at a magnification of  $\times 20$ . A scale bar of  $200\mu\text{M}$  is included.