

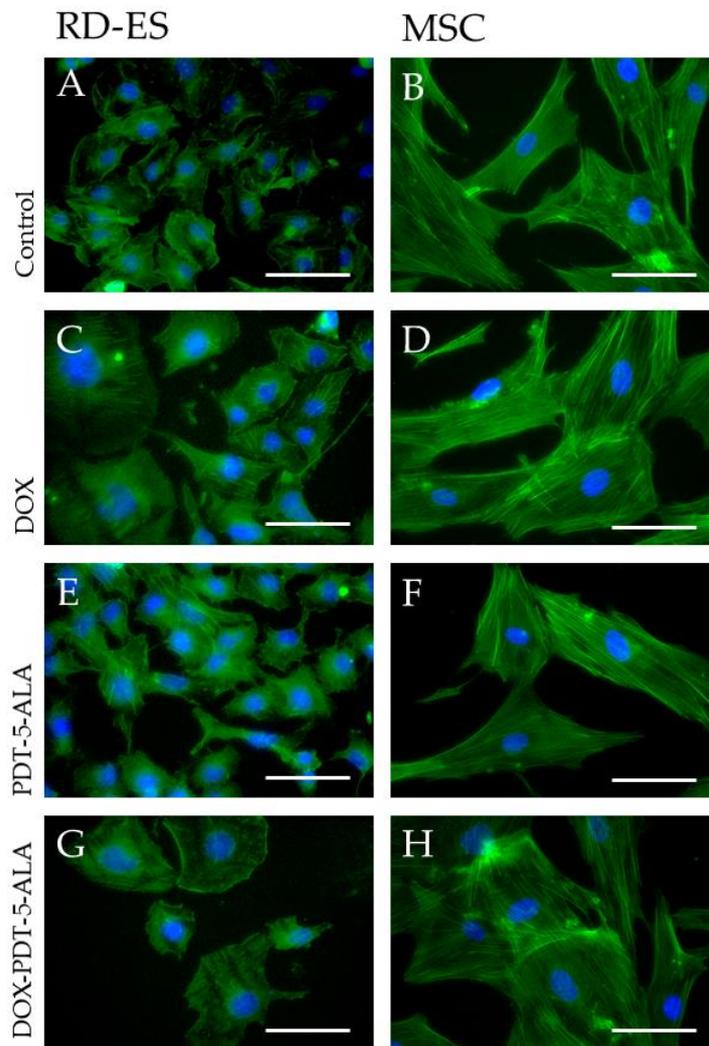
## **Online supplement**

### **Methods**

#### Cytoskeleton labelling

Following AFM measurements, RD-ES cells and MSC were fixed for 10 min with 4 % (v/v) paraformaldehyde (PFA, Sigma-Adrich) in PBS at room temperature and washed two times with PBS. Following the manufacturer's instructions, the F-actin cytoskeleton was stained with CellMask™ Green Actin Tracking Stain (#A57243; Thermo Fisher Scientific, Waltham, Massachusetts, USA) and washed three times with PBS. Fluorescent images were recorded using a fluorescence microscope (Leica DMI8 microscope, Leica, Wetzlar, Germany) at a 40-fold magnification.

## Results



**Figure S1. Representative figures of F-actin organization in human ES cells and MSC after DOX and 5-ALA-mediated PDT.** Post 5-ALA PDT – DOX treatment RD-ES cell line (A,C,E,G) as well as the control cells - MSC (B,D,F,H) were subjected to F-actin labelling (green fluorescence). Cell nuclei were stained with DAPI ( blue). 40-fold magnification, scale bar (white) represents 200  $\mu$ M. Abbreviations: 5-ALA – 5-aminolaevulinic acid, DOX – doxorubicin, ES – Ewing sarcoma, MSC- mesenchymal stem cell, PDT – photodynamic therapy, sec – seconds.