**Supplementary Table IV.** Methods to determine intracellular reactive oxygen species (ROS)

Detection of ROS was performed using dichlorodihydrofluorescein diacetate (H$_2$DCF-DA) (Molecular Probes, Invitrogen, Carlsbad, CA). This probe has high reactivity to hydrogen peroxide and low reactivity to superoxide anions. After transfection, the cells were washed with PBS, centrifuged (500g, 5 min), resuspended in PBS and incubated with 10 µM H$_2$DCF-DA for 20 min at 37°C. To detect cellular fluorescence, the fluorochrome-loaded cells were excited using a 488-nm argon-ion laser in a flow cytometer. The dichlorofluorocine (DCF) emission was recorded at 530 nm. Data were collected using a flow-cytometer from at least 5000 cells. Alternatively dihydroethidium (DHE) (Molecular Probes, Invitrogen, Carlsbad, CA) fluorescence was recorded using the same protocol with excitation at 488 nm and emission at 575 nm. As additional approach, the Image-iT live green ROS detection system (Molecular Probes, Invitrogen, Carlsbad, CA) was used to visualize ROS in live cells. Fluorescent carboxy-H$_2$DCF-DA permeates live cells and is deacetylated by non-specific intracellular esterases. In the presence of ROS, the reduced fluorescein compound is oxidized and emits bright green fluorescence. Fluorescence microscopy (10x, Axiovert 200M; Zeiss, Oberkochen, Germany) was performed to capture images of nuclei (blue fluorescence; Hoechst 33342) and oxidized fluorescein. Transfected cells were activated with either PMA (Sigma-Aldrich, St. Louis, MO), TNFα or VEGF$_{165}$ (R&D Systems, Minneapolis, MN). Cells were serum-starved for 16 h with 0.5 % FBS prior to treatment with VEGF.

**References**
