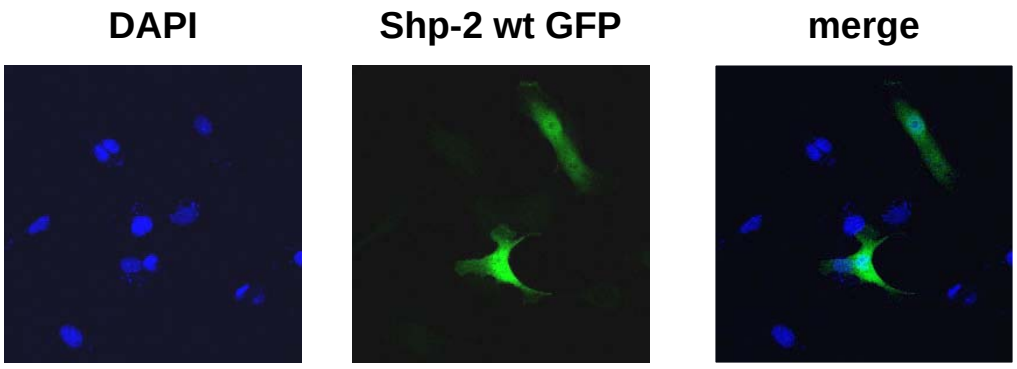
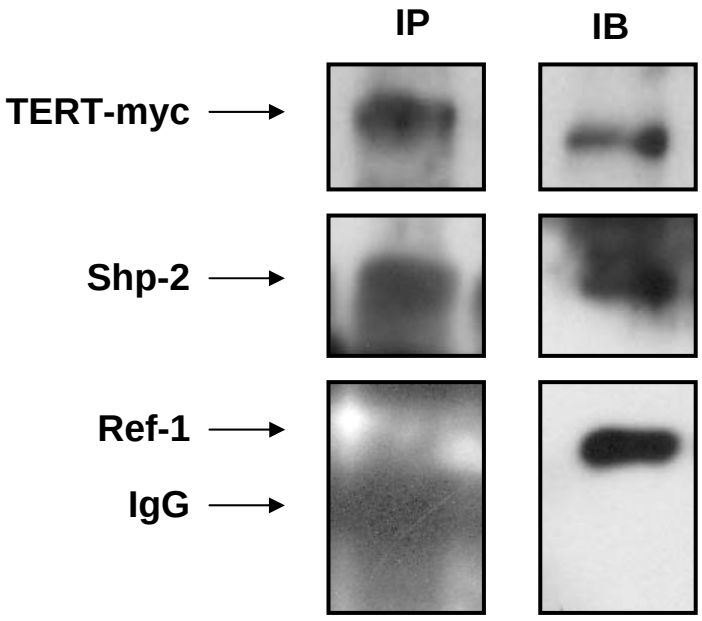
supplementary figure 1: Jakob et al.



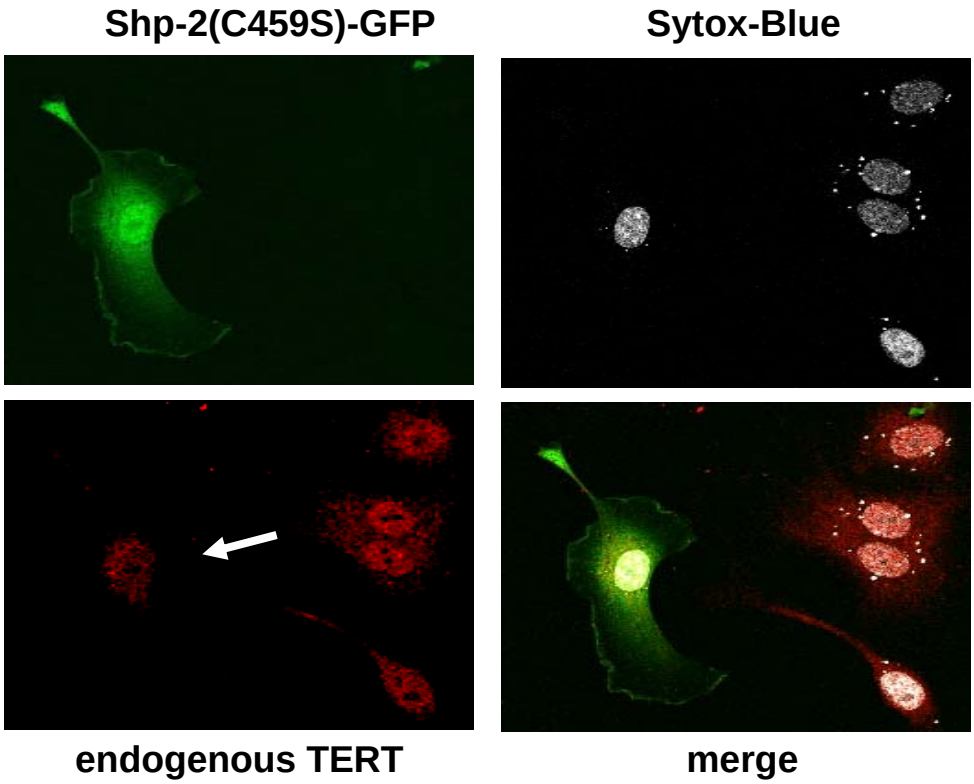
Shp-2 localization in endothelial cells. Shp-2 wt-GFP was overexpressed in EC and detected by fluorescence microscopy. Left panel: nuclear staining with DAPI, middle panel: Shp-2 wt GFP, right panel: merge. Transfected cells show an even distribution of Shp-2 wt-GFP between nucleus and cytoplasm.

supplementary figure 2: Jakob et al.



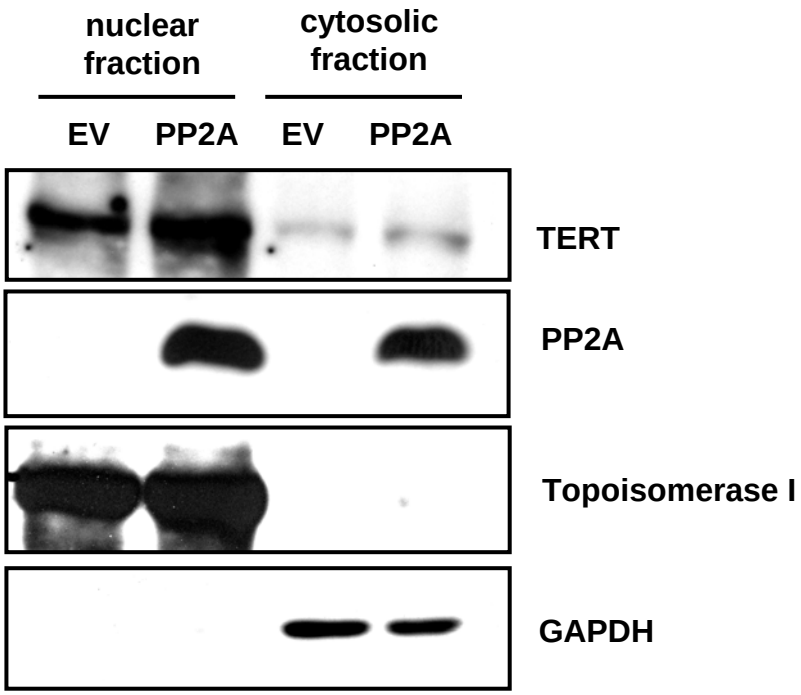
The nuclear transcription factor Ref-1 does not associate with TERT-myc and endogenous Shp-2. HEK cells were transfected with TERT-myc, lysed and the lysates used for immunoprecipitations (IP) with an anti myc-antibody. Immunoblots with the precipitates (left panels) and 25 µg of total protein (IB) (right panels) were performed with an anti-myc antibody (TERT-myc, upper panels), anti-Shp-2 (middle panels) and anti-Ref-1 (lower panels). IgG denotes the antibody used for immunoprecipitation.

supplementary figure 3: Jakob et al.



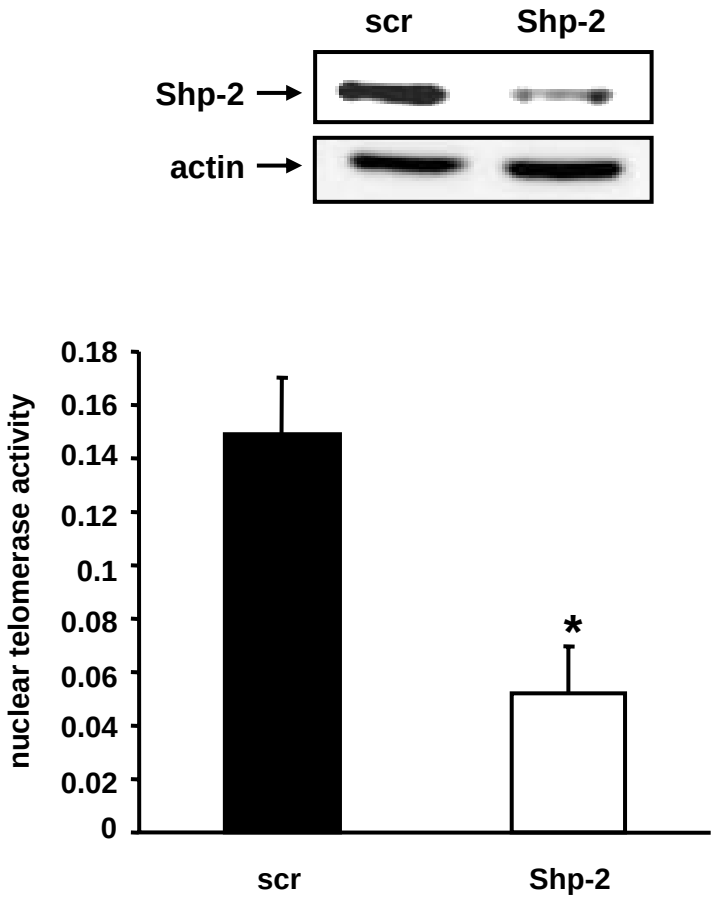
Dominant negative Shp-2 reduces nuclear TERT protein. Endothelial cells were transfected with Shp-2(C459S)-GFP and analyzed by fluorescence microscopy. Endogenous TERT was detected by immunostaining using a Texas Red coupled secondary antibody. Top left panel: Shp-2(C459S)-GFP, top right panel: nuclear staining with Sytox Blue, bottom left panel: endogenous TERT, bottom right panel: merge. In Shp-2(C459S)-GFP transfected cells (white arrow) the nuclear staining of TERT is reduced in comparison to non-transfected cells.

supplementary figure 4: Jakob et al.



PP2A did not alter endogenous nuclear TERT protein. HEK cells were transfected with empty vector (EV) or PP2A. Immunoblots of lysates from nuclear and cytosolic extracts were performed with an anti-TERT antibody (upper panel) and an anti-PP2A antibody (lower upper panel). Anti-topoisomerase I antibody (upper lower panel) was used as nuclear marker and anti-GAPDH antibody as cytosolic marker (lower panel).

supplementary figure 5: Jakob et al.



Downregulation of Shp-2 reduces nuclear telomerase activity. HUVEC were transfected with Shp-2 siRNA (Shp-2) and scrambled siRNA (scr). Upper panel verifies downregulation of Shp-2. Middle panel shows equal loading using an anit-actin antibody. Nuclear telomerase activity was measured as described under experimental procedures. Data are means +/- SEM (n=3, *p< 0.05 vs scr, n=3) (lower panel).