**Supplementary Methods**

siRNA transfections

Cells were transiently transfected with a mix of three PDGFRβ siRNAs (10 nM in total), (#SR303424, OriGene) or 10 nM of AllStars negative control siRNA (#1027281, Qiagen). Transfection of siRNA was mediated by SilentFect (BioRad Laboratories AB). Six days after the knockdown, cells were starved overnight and stimulated with PDGF-BB.

Stimulation of U2OS cells

Human osteosarcoma cells U2OS were cultured in DMEM + Glutamax supplemented with 10% FBS (Thermo Fisher scientific) at 37°C and 5% CO2. For serum starvation cells were incubated overnight in the same medium containing 0.2% FBS. Cells were seeded in 6-well plates at a density of 50,000 cells/cm2 and left to adhere overnight. The cells were serum-starved overnight before stimulation with 20 ng/ml PDGF-BB (Peprotech) at 37°C for the indicated time periods. Cells were lysed and subject to SDS-PAGE, followed by immunoblotting as described for experiments with Bj-hTERT cells.