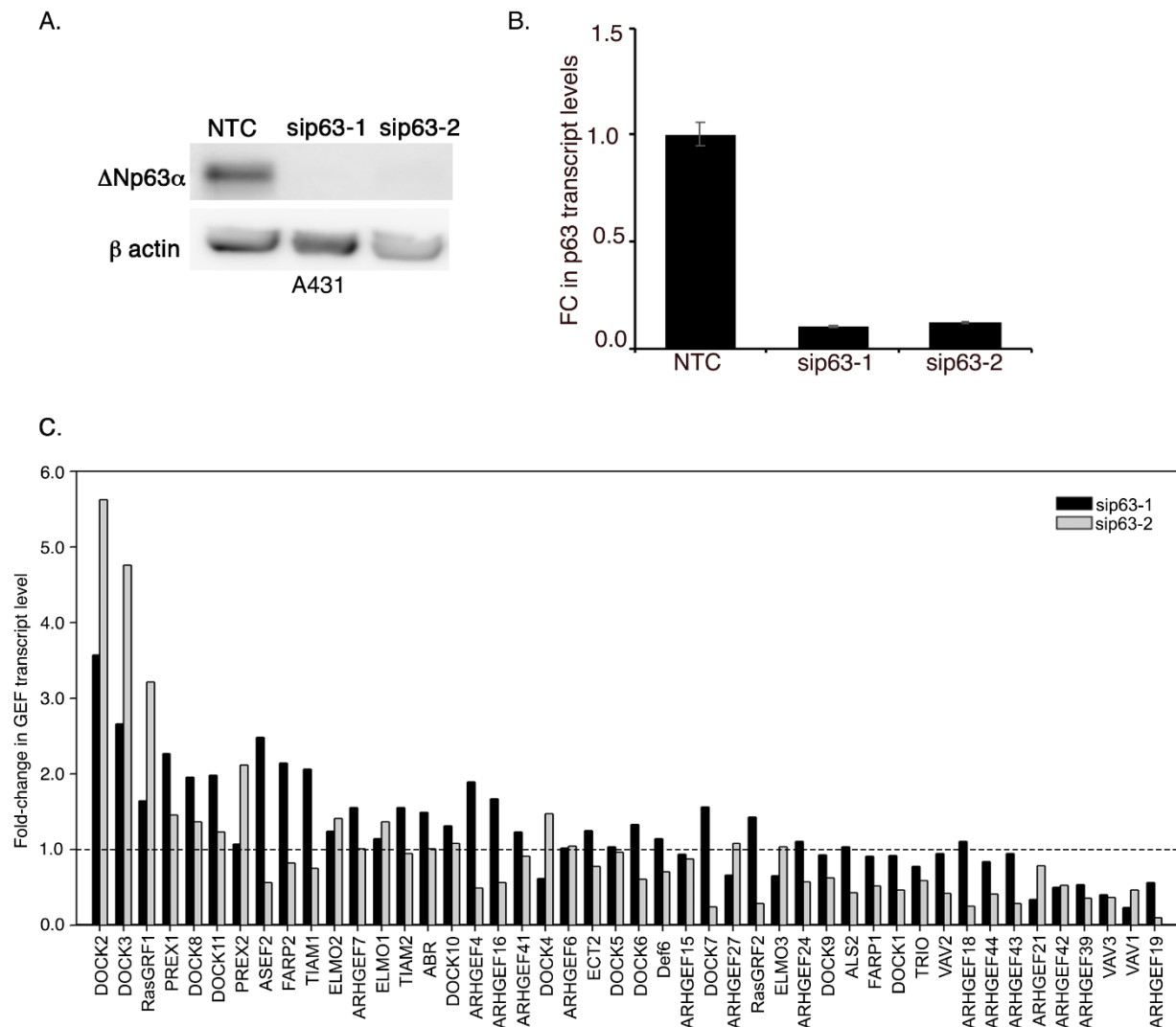


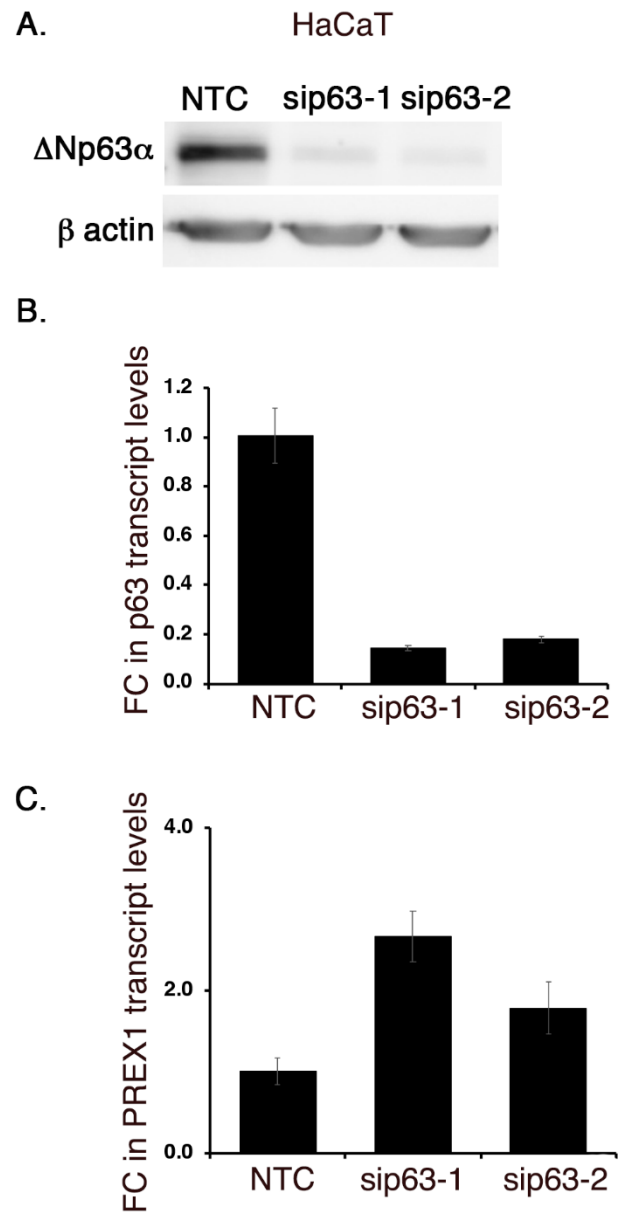
Supplemental Figures

Δ Np63 α inhibits Rac1 activation through suppression of *PREX1* leading to inhibition in cancer cell invasion

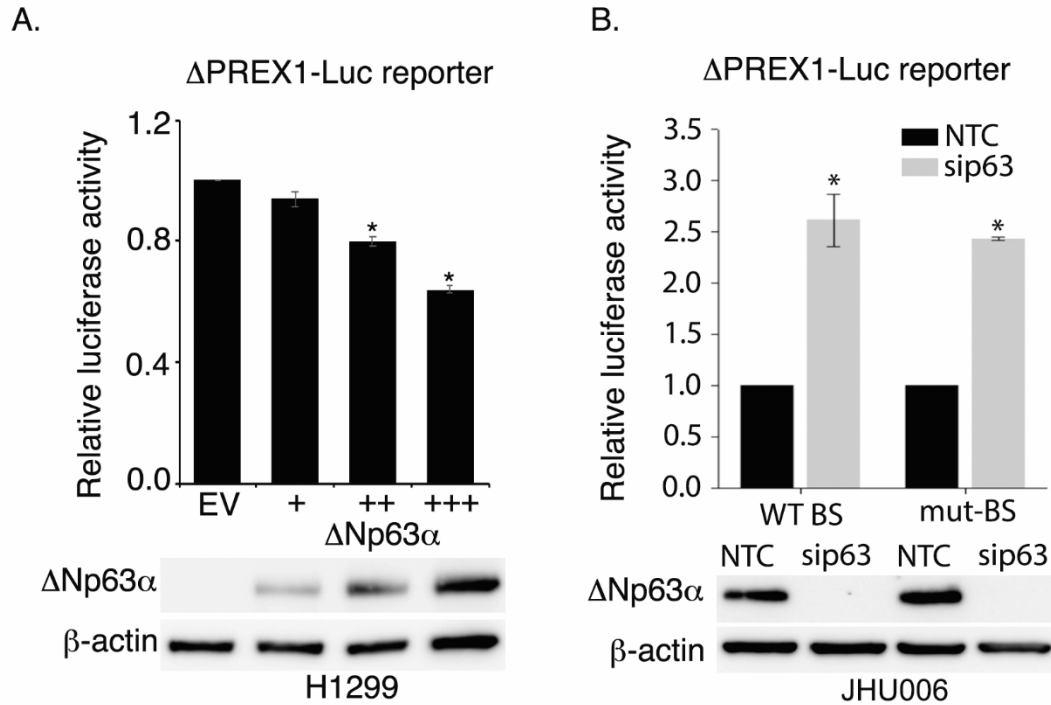
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Supplemental Figure 1. Effect of Δ Np63 α knockdown on expression of 43 Rac-GEFs. A431 cells were transfected with non-targeting control (NTC) or two different p63-targeted siRNAs, sip63-1 or sip63-2. **(A)** Immunoblots of Δ Np63 α in A431 samples used in the Rac-GEF array. **(B)** Total RNA was extracted and Δ Np63 α transcript levels were measured by TaqMan based qRT-PCR. Data are presented as mean $\pm$ 1 SD. **(C)** Transcription of Rac-GEFs in A431 cells transfected with NTC, sip63-1 or sip63-2 as determined by GEF Array. Transcripts for 43 Rac-GEFs were quantified by qRT-PCR in 96-well plates and normalized to beta-2-microglobulin and ubiquitin C (UBC). The fold-change in each transcript relative to NTC-transfected cells was calculated for sip63-1 (black bars) or sip63-2 (gray bars).



Supplemental Figure 2. Δ Np63 α knockdown upregulates *PREX1* transcript in HaCaT cells. HaCaT cells were transfected with non-targeting control (NTC) or two different p63-targeted siRNAs, sip63-1 or sip63-2. **(A)** Representative immunoblot of p63 in HaCaT cells transfected. Total RNA was extracted and **(B)** Δ Np63 α or **(C)** *PREX1* mRNA was quantified using Taqman qRT-PCR. The fold-change (FC) in Δ Np63 α and *PREX1* mRNA was calculated in sip63-1 and sip63-2 transfected cells relative to NTC-transfected cells. Error bars indicate +1 SD from 3 independent experiments.



Supplemental Figure 3. Δ Np63 α indirectly represses the transcription activity of *PREX1* promoter. (A) H1299 cells were co-transfected with Δ PREX1-Luc reporter plasmid and either empty vector (EV) control or increasing concentrations of Δ Np63 α expression plasmid. At 24 h after transfection, a dual luciferase assay was performed in triplicate. Relative luciferase units (RLU) were calculated as the ratio of Firefly luciferase activity to *Renilla* luciferase activity and normalized to EV control. Values are shown as mean $\pm$ S.E.M from 3 independent experiments. Statistically significant values ($P \leq 0.05$) relative to EV controls are indicated with an asterisk. **(B)** JHU006 cells were co-transfected with nontargeting control (NTC) siRNA or p63-targeted siRNA (sip63). After 24 h, cells were transfected with Δ PREX1-Luc with the wild-type p63 binding site (WT BS) or mutant Δ PREX1-Luc reporter plasmid (mut-BS). Following another 24h, a dual luciferase assay was performed. RLU were calculated as the ratio of Firefly luciferase activity to *Renilla* luciferase activity and normalized to NTC control. Values are shown as mean $\pm$ 1 S.E.M from 2 independent experiments. Statistically significant values ($P \leq 0.05$) relative to NTC control are indicated with an asterisk. Δ Np63 α protein and the β -actin loading control were analyzed by immunoblot (bottom).