Inhibin-A and Decorin Secreted by Human Adult Renal Stem/Progenitor Cells Through the TLR2 Engagement Induce Renal Tubular Cell Regeneration

AUTHORS

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Supplementary Information

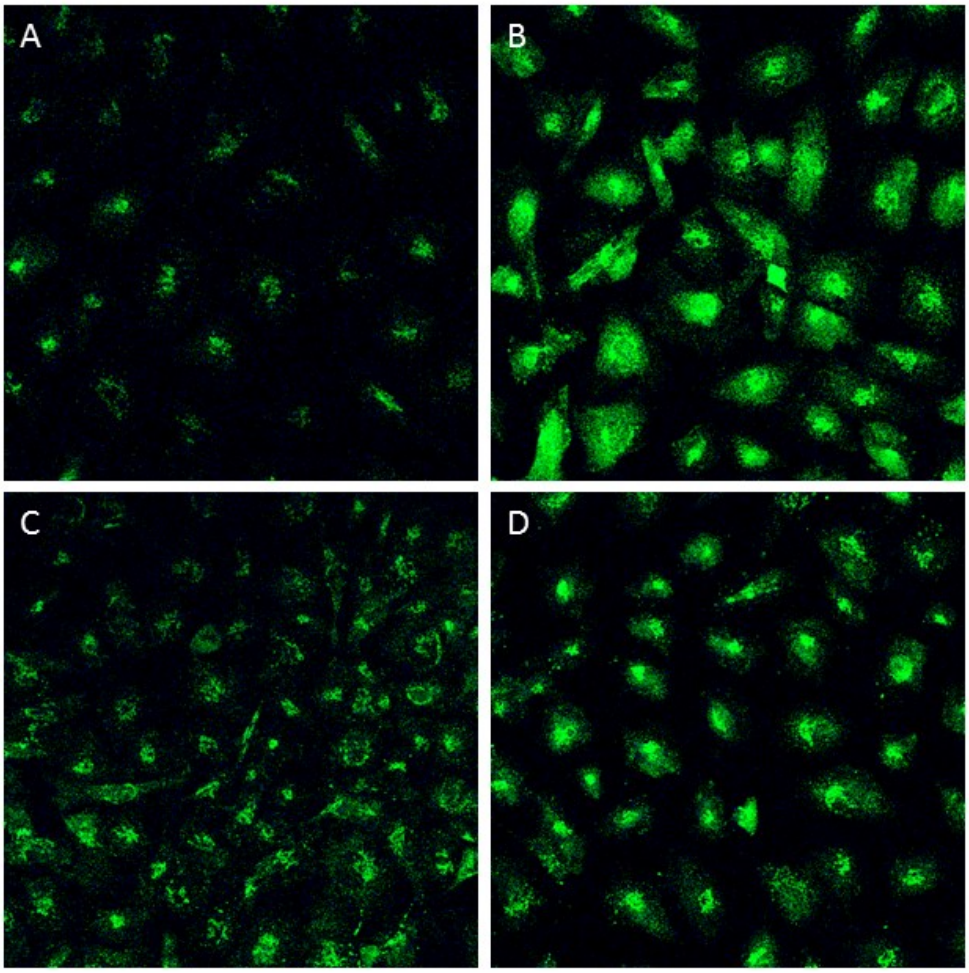

Figure S1. tARPCs can abrogate cisplatin-induced apoptosis of RPTECs.

Immunofluorescence stainings show that the cleaved-caspase 3 expression on cisplatin-damaged RPTECs significantly increased (B) compared to untreated cells (A) after one day of cell culture. Instead, when the RPTECs were co-cultured with tARPCs, the cleaved-caspase 3 was less expressed (C). Panel D represents a positive control of cleaved-caspase 3 reaction on RPTECs treated with H_2O_2. Magnification 630x.

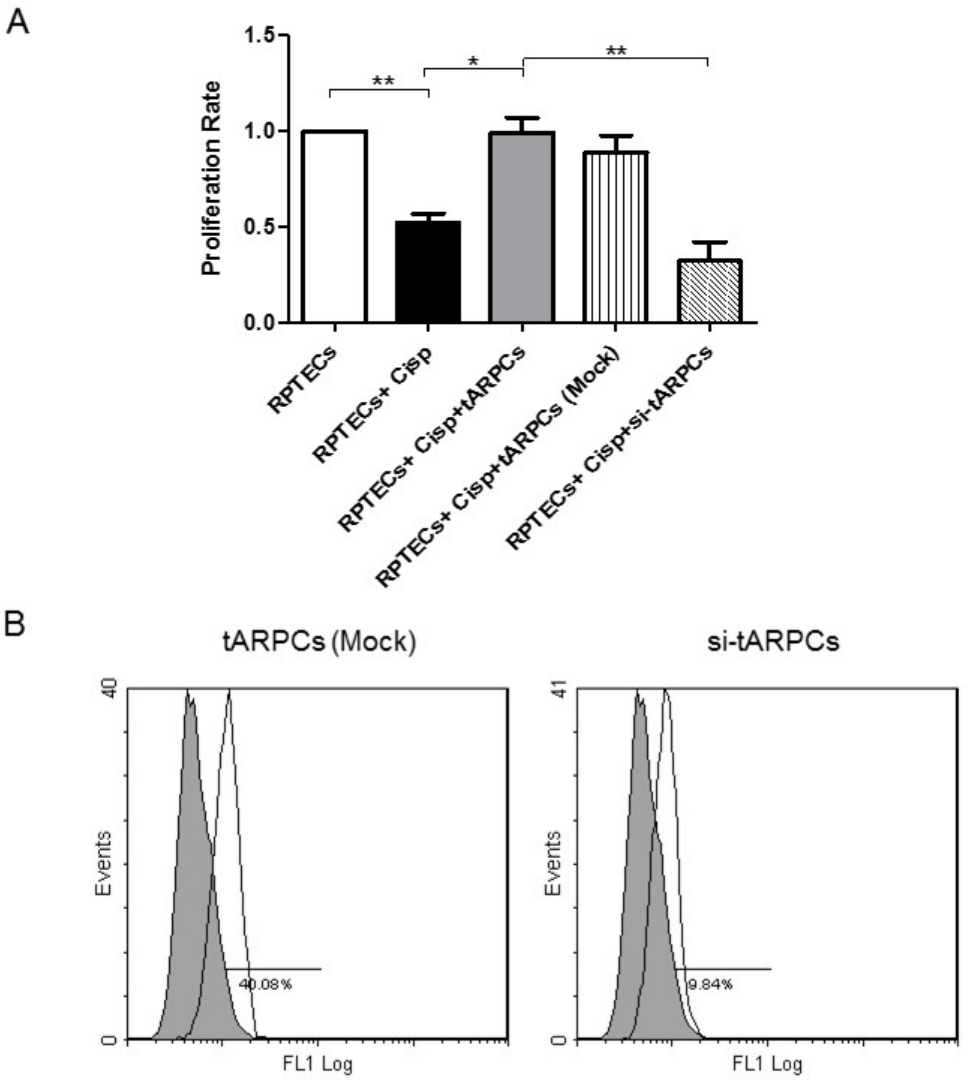

Figure S2. The TLR2 is responsible for tubular cell regeneration.

A) A significant inhibition of the recovery process was found when tARPCs were silenced with small interfering RNA for the TLR2 and co-cultured with cisplatin-damaged RPTECs compared to non-silenced tARPCs. The abrogation of the functional effect was observed when TLR2 expression inhibition was approximately 40% or higher. RPTECs without cisplatin were used as control. The mock-transfection control was obtained when cells underwent the cell transfection procedure without adding siRNA. *= ≤ 0.05, **= ≤ 0.005. B) Efficiency of TLR2 silencing was evaluated by FACS analysis. ARPCs expressing the TLR2 decreased from 40% to 10% after silencing, showing that the efficiency was about 75%.