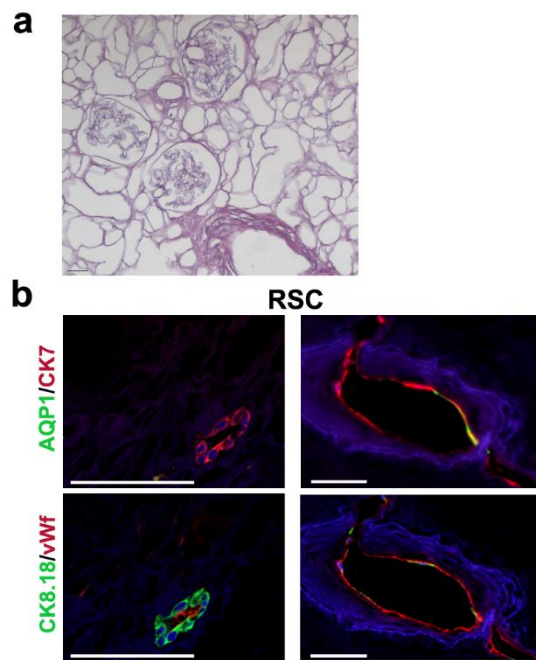
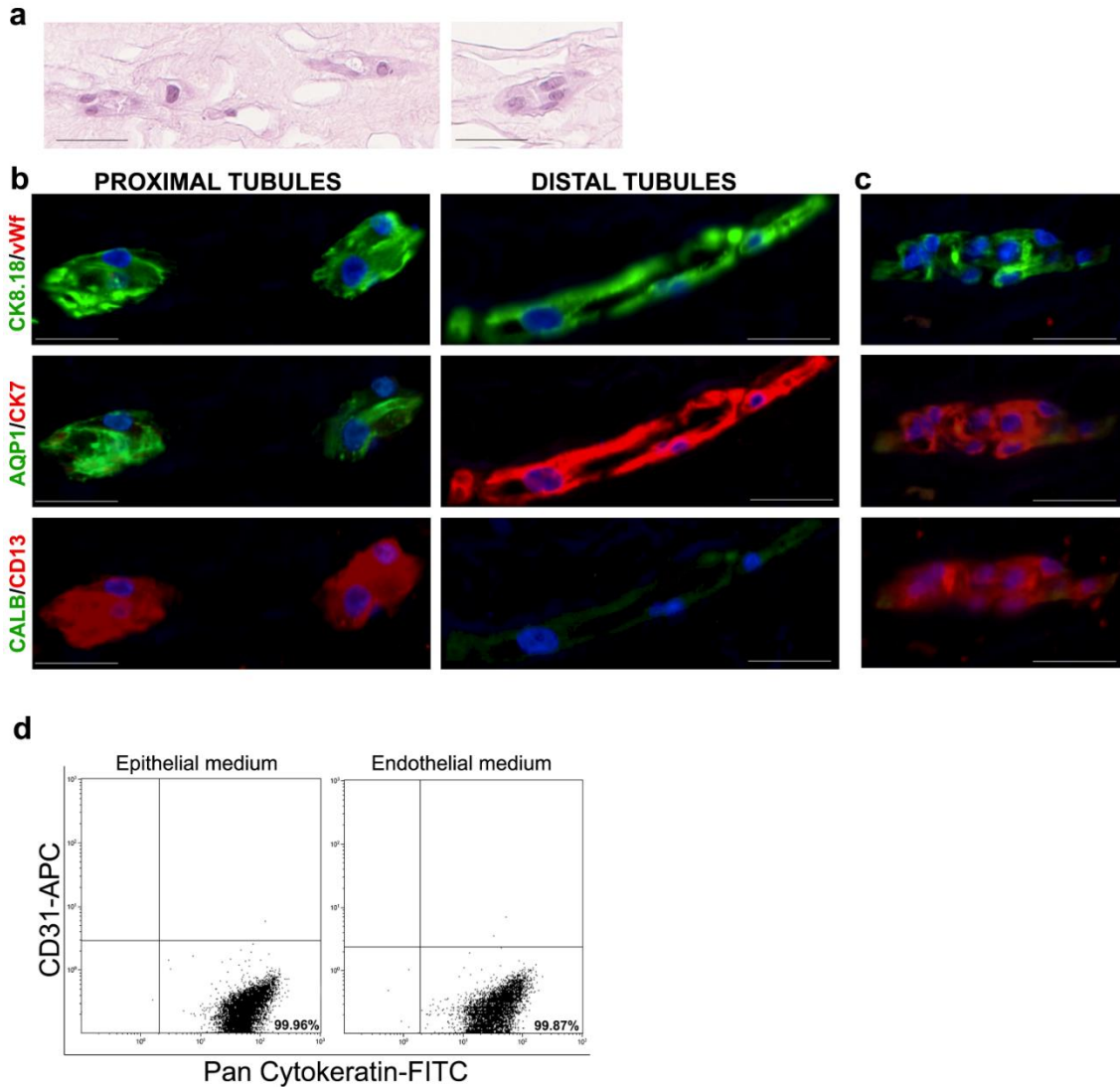


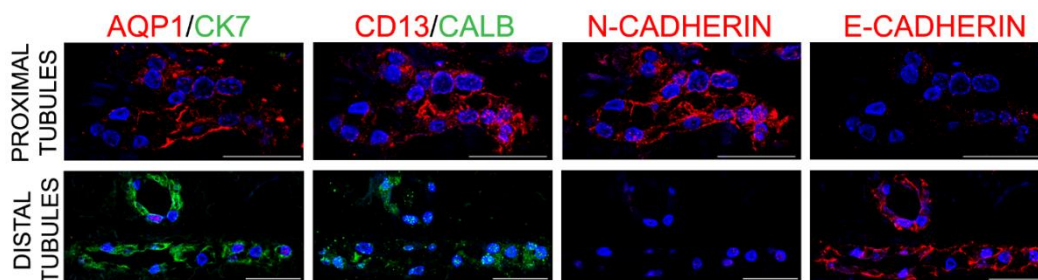
SUPPLEMENTARY FILE MS 812089 Bombelli S. et al.



Supplementary Figure S1: Histological characterization of decellularized scaffolds repopulated with RSC. (a) Representative H&E staining of FFPE scaffold sections after 30 days without seeding any cells. Scale bars, 100 μm . (b) Representative IF analysis of FFPE scaffolds repopulated with RSC. The antibodies against the indicated markers recognise cells that co-express specific tubular epithelial and endothelial markers. Sequential immunostaining has been performed. Scale bars, 100 μm . CK: Cytokeratin; AQP: Aquaporin; vWf: von Willebrand Factor; Blue: DAPI.



Supplementary Figure S2: Differentiation abilities of PKH^{low/neg} progenitor cells. (a-b-c) Five independent experiments of human kidney scaffold repopulation for 30 days with PKH^{low/neg} cells in presence of basal medium were performed. (a) Representative H&E staining of FFPE repopulated scaffold sections. Scale bars, 50 μ m. (b-c) Representative sequential IF analysis of the FFPE repopulated scaffolds with the antibodies against the indicated markers that recognise specific tubular or vascular phenotypes. Scale bars, 50 μ m. CK: Cytokeratin; AQP: Aquaporin; CALB: Calbindin D-28k; vWf: von Willebrand Factor; Blue:DAPI. (d) FACS analysis of representative clones obtained from single PKH^{low/neg} cells at ten days of culture in epithelial and endothelial media. The CD31 and Cytokeratin markers were evaluated.



Supplementary Figure S3: Histological characterization of decellularized scaffolds repopulated with RSC. Representative sequential IF analysis of the FFPE repopulated scaffolds with the antibodies

against the indicated markers that recognise specific proximal (AQP1, CD13, N-Cadherin) or distal (CK7, CALB, E-Cadherin) tubular phenotypes. CK: Cytokeratin; AQP: Aquaporin; CALB: Calbindin D-28k.