Supporting Information

Suprynowicz et al. 10.1073/pnas.1213241109

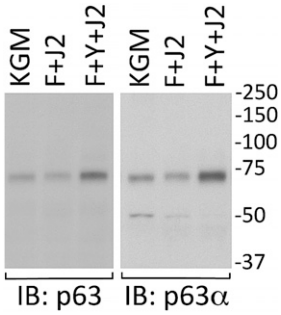

Fig. S1. ΔNp63α is the only detectable p63 isoform in HECs. Whole cell lysates of HECs growing in KGM, or in F-medium in the presence or absence of 10 μM Y-27632, were analyzed on Western blots labeled with an antibody that detects all p63 isoforms (IB: p63) or a p63α-specific antibody (IB: p63α). Molecular mass markers (in kDa) are shown on the right. A 72-kDa band is detected by both antibodies, which corresponds to the apparent molecular weight of ΔNp63α on SDS polyacrylamide gels (1).

1. Petitjean A, et al. (2008) Properties of the six isoforms of p63: p53-like regulation in response to genotoxic stress and cross talk with DeltaNp73. *Carcinogenesis* 29(2):273–281.

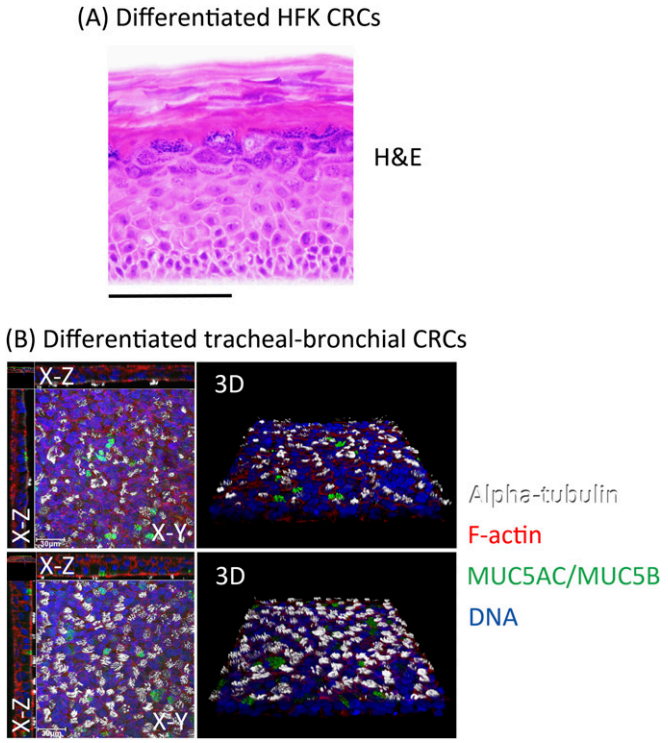

Fig. S2. Additional examples of the maintenance of tissue-specific developmental potential in CRCs. (*A*) H&E-stained histological section of primary human foreskin keratinocyte (HFK) CRCs that differentiated into a stratified squamous epithelium in air–liquid interface culture upon removal of Y-27632 and feeder cells. (Scale bar: 100 μm.) (*B*) Confocal microscopy of tracheal-bronchial CRCs from two additional donors that differentiated into pseudostratified mucociliary epithelia in air–liquid interface cultures upon removal of Y-27632 and feeders. The cultures were fixed using paraformaldehyde and fluorescently labeled with phalloidin (F-actin), Hoechst dye 33342 (DNA), or antibodies demonstrating the presence of cilia (alpha-tubulin) and mucins 5AC and 5B (MUC5AC/MUC5B). Two *X–Z* cross-sections, an extended focus *X–Y* view and corresponding three-dimensional (3D) view are shown for each culture.

Table S1. Properties of stem cells and stem-like cells

Property	ESCs	iPSCs	CRCs
Origin	Blastocyst	Adult mesenchymal	Adult epithelial
Telomerase	High	High	High
Telomere length	Maintained	Maintained	Decrease, then stabilize
Immortal	Yes	Yes	Yes (conditional)
Pluripotent	Yes	Yes	No
Tumorigenic	Yes	Yes	No
Karyotypic stability	No	No	Yes
Rapid generation	No	No	Yes
Rapid reversal	No	No	Yes

Table S2. Antibodies used in the study by Suprynowicz et al.

Antigen	Source	Antibody type	Application
Integrin α6	Epitomics	Rabbit monoclonal	WB
Integrin β1	Epitomics	Rabbit monoclonal	WB
p63α	Santa Cruz	Rabbit polyclonal	WB
p63	Santa Cruz	Mouse monoclonal	WB
CD44	Cell Signaling	Mouse monoclonal	WB
Notch-1	Epitomics	Rabbit monoclonal	WB
Notch ICD	Epitomics	Rabbit monoclonal	WB
DLL-1	Abcam	Rabbit polyclonal	WB
GAPDH	Santa Cruz	Rabbit polyclonal	WB
Integrin α6	Southern Biotech	Mouse monoclonal	FC
E-cadherin	Santa Cruz	Mouse monoclonal	FC
β-Catenin	Santa Cruz	Mouse monoclonal	WB
Lamin A	Santa Cruz	Rabbit polyclonal	WB
Transferrin receptor	BD/Transduction Labs	Mouse monoclonal	WB
β-Actin	Sigma	Mouse monoclonal	WB
Sox2	Epitomics	Rabbit monoclonal	WB
Oct4	Santa Cruz	Goat polyclonal	WB
Nanog	Abcam	Rabbit polyclonal	WB
Klf4	Abcam	Rabbit polyclonal	WB
c-Myc	Abcam	Rabbit polyclonal	WB
Involucrin	Santa Cruz	Rabbit polyclonal	IF
Cytokeratin 14	Abcam	Mouse monoclonal	IF
Filaggrin	Thermo/Lab Vision	Mouse monoclonal	IF
α-Tubulin	Millipore	Rat monoclonal	IF
Mucin 5AC	Thermo/Lab Vision	Mouse monoclonal	IF
Mucin 5B	John Sheehan*	Rabbit polyclonal	IF

FC, flow cytometry; IF, immunofluorescence microscopy; WB, Western blot.

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