

Supplementary Tables

Supplementary Table 1. Human cell donors' biometric details.

Biopsy Code	Age	Gender	Ethnicity	Sampling conditions / intervention	Biopsy site	Past or present medical history	Smoking habit
AT1	61	Male	Caucasian	Dead donor	Full length trachea	Head trauma	Not available
AT2	67	Male	Caucasian	Dead donor	Full length trachea	Not available	Former smoker
AT3	41	Male	Caucasian	Tracheal resection	Proximal trachea	Post intubation tracheal stenosis	Smoker
AT4	58	Male	Caucasian	Tracheal resection	Proximal trachea	Post-tracheotomy tracheal stenosis	No smoker
AB1	64	Female	Caucasian	Pulmonary lobectomy	Middle bronchus	Not available	Not available
AB2	38	Female	Caucasian	Pulmonary lobectomy	Middle bronchus	Aspergillus pneumonia and pansinusitis	No smoker
AB3	52	Male	Asian	Pulmonary lobectomy	Inferior bronchus	Bronchiectasis	No smoker
AB4	76	Female	Caucasian	Pulmonary lobectomy	Inferior bronchus	Bronchiectasis	Former smoker
AB5	50	Female	Caucasian	Pulmonary lobectomy	Middle bronchus	Bronchiectasis	No smoker

Supplementary Table 2. List of reagents and resources employed

REAGENT or RESOURCE	SOURCE	IDENTIFIER
Antibodies		
Rabbit polyclonal anti-KERATIN 5	Biologend	Cat#905504 RRID:AB_2616956
Rabbit polyclonal anti- KERATIN 14	Biologend	Cat#905301 RRID:AB_2565048
Mouse monoclonal anti- KERATIN 18 (DC10)	Abcam	Cat# ab7797, RRID:AB_306086
Rabbit monoclonal anti- KERATIN 19 (EP1580Y)	Abcam	Cat# ab52625, RRID:AB_2281020
Mouse monoclonal anti-Involucrin	Leica Microsystems	Cat#NCL-INV, RRID:AB_563785
Mouse monoclonal anti-Acetylated Tubulin (6-11b-1)	Sigma	Cat#T7451 RRID:AB_609894
Mouse monoclonal anti-mucin (45 MI)	Progen	Cat#03-16075, RRID:AB_1542395
Rat monoclonal anti-Uteroglobulin (394324)	R&D System	Cat#MAB4218 RRID:AB_2183286
Rabbit polyclonal anti-ZO-1	Thermo Fisher Scientific	Cat#40-2200 RRID:AB_2533456
Rabbit polyclonal anti-Ki-67	Abcam	Cat#ab15580 RRID:AB_443209
Rabbit monoclonal Anti-p16 (EPR20418)	Abcam	Cat#ab211542 RRID:AB_2891084
Mouse monoclonal anti-p63(4A4)	Ventana	Cat#790-4509 RRID:AB_2335989
Rabbit polyclonal anti-p63-alpha	Di Iorio et al., 2005	N/A
Mouse monoclonal anti-14-3-3-Sigma (1.N.6)	Abcam	Cat#ab14123, RRID:AB_300927
Rabbit monoclonal anti-BMI1(D20B7)	Cell Signaling Technology	Cat#6964 RRID:AB_10828713
Rabbit monoclonal anti-SOX2 (D6D9)	Cell Signalling Technology	Cat#3579 RRID:AB_2864411
Mouse monoclonal anti-GAPDH (6C5)	Abcam	Cat# ab8245 RRID:AB_2107448
Mouse monoclonal anti-Vinculin (VIN-11-5)	Sigma-Aldrich	Cat#V4505, RRID:AB_477617
Mouse monoclonal anti-Actin (C4)	Abcam	Cat# ab3280, RRID:AB_303668
Purified anti-Vimentin Antibody	Biologend	Cat# 699302, RRID:AB_2716137
Donkey anti-mouse IgG (H + L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 488	Thermo Fisher Scientific	Cat# A-21202, RRID:AB_141607
Donkey anti-mouse IgG (H + L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 568	Thermo Fisher Scientific	Cat#A-10037, RRID:AB_2534013
Donkey anti-rabbit IgG (H + L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 488	Thermo Fisher Scientific	Cat#A-21206, RRID:AB_2535792
Donkey anti-rabbit IgG (H + L) Cross-Adsorbed Secondary Antibody, Alexa Fluor™ 568	Thermo Fisher Scientific	Cat#A10042, RRID:AB_2534017
Goat anti-rat IgG (H + L) 488	Thermo Fisher Scientific	Cat#A-11006, RRID:AB_2534074
Chicken anti-rat IgG-HRP	Santa Cruz Biotechnology	Cat#sc-2956 RRID:AB_639257
Goat anti-mouse IgG H&L (HRP)	Abcam	Cat#ab6789 RRID:AB_955439
Donkey anti-rabbit IgG-HRP	Santa Cruz Biotechnology	Cat#sc-2313 RRID:AB_641181
Biological samples		
NHBE – Human Bronchial/Tracheal Epithelial Cells with Retinoic Acid	Lonza	Cat#CC-2540
Chemicals		
DMEM High Glucose	Euroclone	Cat#ECB7501L
Ham's F12	Euroclone	Cat#ECB7502L
Fetal bovine serum characterized	HyClone	Cat#SH30071.03
Donor bovine serum	Thermo Fisher Scientific	Cat#16030-074
L-Glutamine 100X	Euroclone	Cat#ECB3000D
Penicillin-Streptomycin 100X	Euroclone	Cat#ECB3001D
Amphotericin B	Thermo Fisher Scientific	Cat#15290018
Gentamicin	Thermo	Cat#15710064

	Fisher Scientific	
0.25% Trypsin-EDTA 1X	Thermo Fisher Scientific	Cat#25200-072
0.5% Trypsin-EDTA 10X	Thermo Fisher Scientific	Cat#15400-054
4',6-diamidino-2-fenilindolo	Merck	Cat#10236276001
Dako Fluorescence Mountain Medium	Agilent	Cat#S3023
BEGM™ Bronchial Epithelial Cell Growth Medium BulletKit™	Lonza	Cat#CC-3170
Critical commercial assays		
Cell Comb™ Scratch Assay	Merck	Cat#17-10191
Software and Algorithms		
GraphPad Prism 8	GraphPad Software	RRID:SCR_002798
ImageJ	National Institute of Health	RRID:SCR_003070
Image Lab software	Bio-Rad	RRID:SCR_014210