

Materials List for

Translational 3D-Cell Culture Model to Assess Hyperoxia Effects on Human Neonatal Airway Epithelial Cells

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jove.com/video/65913

Materials

Name	Company	Catalog Number	Comments
10% Buffered Formalin	Fisher Scientific	23-426796	
1X PBS (Phosphate Buffered Saline) Solution, pH 7.4	Gibco	10010049	
A 83-01	Tocris	29-391-0	
ALI Transwell Inserts, 6.5mm	Corning	3470	
Anti-Acetylated Tubulin antibody, Mouse monoclonal	Sigma	T7451	
Anti-alpha Tubulin antibody	Abcam	ab7291	
Anti-Cytokeratin 5 antibody	Abcam	ab53121	
BronchiaLife Epithelial Airway Medium (BLEAM)	LifeLine Cell Technology	LL-0023	
CHIR 99021	Tocris	44-231-0	
Cleaved caspase-3 antibody	Cell signaling	9664T	
SCGB1A1 or Club Cell Protein (CC16) Human, Rabbit Polyclonal Antibody	BioVendor R&D	RD181022220-01	
CM-H2DCFDA (General Oxidative Stress Indicator)	Thermo Scientific	C6827	
Corning Cell Culture Treated T25 Flasks	Corning	430639	
Corning U-Shaped Cell Culture T75 Flasks	Corning	430641U	
CyQUANT LDH Cytotoxicity Assay	Thermo Scientific	C20300	
DAPI Solution (1 mg/mL)	Fisher Scientific	EN62248	
Dimethyl sulfoxide [DMSO] Hybri-Max	Sigma	D2650	
Distilled water	Gibco	15230162	
EVOM Manual for TEER Measurement	World Precision Instrument	EVM-MT-03-01	

FBS (Fetal Bovine Serum)	Gibco	10082147	
Fluorescein Isothiocyanate Dextran (average mol wt 10,000)	Fisher Scientific	F0918100MG	
Fluorescein isothiocyanate–dextran (average mol wt 20,00)	Sigma	FD20-100MG	
Goat Anti-Mouse IgG(H+L), Human ads-HRP	Southern Biotech	1031-05	
Goat anti-Mouse IgG2b Cross-Adsorbed Secondary Antibody, Alexa Fluor 488	Invitrogen	A-21141	
Goat anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor 546	Invitrogen	A-11035	
Goat Anti-Rabbit IgG(H+L), Mouse/ Human ads-HRP	Southern Biotech	4050-05	
HBTEC Air-Liquid Interface (ALI) Differentiation Medium	LifeLine Cell Technology	LM-0050	
HEPES	Lonza	CC-5024	
Heracell VIOS 160i Tri-Gas CO2 Incubator, 165 L	Thermo Scientific	51030411	
High-Capacity cDNA Reverse Transcription Kit	Thermo Scientific	4368814	
HLL supplement	LifeLine Cell Technology	LS-1001	
ImageJ	NIH	N/A	imagej.nih.gov/ij/
Invivogen Normocin - Antimicrobial Reagent	Fisher Scientific	NC9273499	
L-Glutamine	LifeLine Cell Technology	LS-1013	
Normal Goat Serum	Gibco	PCN5000	
Normocin	Invivogen	ant-nr-05	
p63 antibody	Santa Cruz Biotechnology	sc-25268	
ProLong Gold Antifade Mountant	Invitrogen	P36930	
PureLink RNA Mini Kit	Thermo Scientific	12183025	
RAPAMYCIN	Thermo Scientific	AAJ62473MC	
TaqMan Fast Advanced Master Mix	Thermo Scientific	4444964	
Taqman Gene Expression Assays: 18S rRNA	Thermo Scientific	Hs99999901_s1	
Taqman Gene Expression Assays: CAT	Thermo Scientific	Hs00156308_m1	
Taqman Gene Expression Assays: FOXJ1	Thermo Scientific	Hs00230964_m1	
Taqman Gene Expression Assays: GAPDH	Thermo Scientific	Hs02786624_g1	
Taqman Gene Expression Assays: GPX1	Thermo Scientific	Hs00829989_gH	
Taqman Gene Expression Assays: GPX2	Thermo Scientific	Hs01591589_m1	
Taqman Gene Expression Assays: GPX3	Thermo Scientific	Hs01078668_m1	
Taqman Gene Expression Assays: KRT5	Thermo Scientific	Hs00361185_m1	
Taqman Gene Expression Assays: MUC5AC	Thermo Scientific	Hs01365616_m1	
Taqman Gene Expression Assays: SCGB1A1	Thermo Scientific	Hs00171092_m1	

Taqman Gene Expression Assays: SOD1	Thermo Scientific	Hs00533490_m1	
Taqman Gene Expression Assays: SOD2	Thermo Scientific	Hs00167309_m1	
Thermo Scientific Nalgene Rapid-Flow Sterile Disposable Filter Units with PES Membrane (0.22 µm pores, 500 ml)	Thermo Scientific	5660020	
TM-1 Combined Supplement	LifeLine Cell Technology	LS-1055	
Total caspase-3 antibody	Cell signaling	14220S	
Triton X-100	Sigma	9036-19-5	
Trypsin-EDTA (0.05%), Phenol red	Gibco	25300062	
Y-27632 2 HCl	Tocris	12-541-0	