

Materials List for:

Generation of ESC-derived Mouse Airway Epithelial Cells Using Decellularized Lung Scaffolds

Sharareh Shojaie¹, Joyce Lee¹, Jinxia Wang¹, Cameron Ackerley¹, Martin Post¹

¹Department of Physiology and Experimental Medicine, Peter Gilgan Centre for Research and Learning, Hospital for Sick Children

Correspondence to: Martin Post at martin.post@sickkids.ca

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Materials

Name	Company	Catalog Number	Comments
Reagents			
Perfusion solution	Sigma	H0777	10 U/ml heparin
Perfusion solution	Gibco	14170112	dissolved in Hank's balanced salt solution (HBSS-)
Decellularization solution	BioShop	CHA003	8 mM CHAPS
Decellularization solution	Sigma	E9884	25 mM EDTA
Decellularization solution	BioShop	SOD002	1 M NaCl
Decellularization solution	Gibco	14190-144	dissolved in PBS
Benzonase nuclease	Novagen	70664-3	90 U/ml Benzonase nuclease
Benzonase nuclease	Gibco	14190-144	diluted in PBS
Antimicrobial solution	Gibco	15140	200 U/ml penicillin streptomycin
Antimicrobial solution	Gibco	15290	25 µg/ml amphotericin B
Antimicrobial solution	Gibco	14190-144	diluted in PBS
Trypsinization	Gibco	12605-028	TrypLE
Serum free differentiation media (SFDM)	Gibco	IMDM 2440-053, F12 11765-054	3:1 ratio of IMDM and Ham's modified F12 medium
Serum free differentiation media (SFDM)	Gibco	12587-010	B27 supplement (50x dilution)
Serum free differentiation media (SFDM)	Gibco	17502-048	N2 supplement (100x dilution)
Serum free differentiation media (SFDM)	Gibco	15260-037	0.05% (Fraction V) bovine serum albumin
Serum free differentiation media (SFDM)	Gibco	35050-061	200 mM Glutamax
Serum free differentiation media (SFDM)	Sigma	M6145	4 µM monothioglycerol
Serum free differentiation media (SFDM)	Sigma	A4403	0.05 mg/ml ascorbic acid
Endoderm induction	R&D	338-AC/CF	Activin A
Antibodies			
CDH1	BD Biosciences	610181	Mouse, non-conjugated, 1:100
C-KIT	BD Biosciences	558163	Rat, PE-Cy7, 1:100
CXCR4	BD Biosciences	558644	Rat, APC, 1:100
KRT5	Abcam	ab24647	Rabbit, non-conjugated, 1:1,000
NKX2-1	Abcam	ab76013	Rabbit, non-conjugated, 1:200
Laminin	Novus Biologicals	NB300-144	Rabbit, non-conjugated, 1:200
SCGB1A1	Santa Cruz	sc-9772	Goat, non-conjugated, 1:1,000

SOX2	R&D Systems	AF2018	Goat, non-conjugated, 1:400
TRP63	Santa Cruz	sc-8431	Mouse, non-conjugated, 1:200
TUBB4A	BioGenex	MU178-UC	Mouse, non-conjugated, 1:500
Goat IgG	Invitrogen	A-11055	Donkey, Alexa Fluor 488, 1:200
Mouse IgG	Invitrogen	A-21202	Donkey, Alexa Fluor 488, 1:200
Mouse IgG	Invitrogen	A-31571	Donkey, Alexa Fluor 647, 1:200
Rabbit IgG	Invitrogen	A-21206	Donkey, Alexa Fluor 488, 1:200
Rabbit IgG	Invitrogen	A-31573	Donkey, Alexa Fluor 647, 1:200
Other Materials			
Low adherent plates	Nunc	Z721050	Low cell binding plates, 6 wells
Air-liquid interface membranes	Whatman	110614	Hydrophobic Nucleopore membrane, 8 μ m pore size
Vibratome	Leica	VT1200S	Leica Vibratome
Tissue Adhesive	Ted Pella	10033	Pelco tissue adhesive