

Materials List for:

Establishing a Liquid-covered Culture of Polarized Human Airway Epithelial Calu-3 Cells to Study Host Cell Response to Respiratory Pathogens *In vitro*

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Materials

Name	Company	Catalog Number	Comments
REAGENTS			
Calu-3	ATCC	HTB-55	
0.05% Trypsin - 0.02% EDTA	Gibco/Invitrogen	25300	
Eagle's Minimum Essential Medium (EMEM)	Gibco/Invitrogen	07-00100DK	
Fetal bovine serum (FBS)	HyClone	SH30070.03	Heat-inactivate, 56 °C, 30 mins
Non-essential amino acids 100X (10 mM)	Gibco/Invitrogen	11140	Store at 4 °C in the dark
L-glutamine	Gibco/Invitrogen	25030	
HEPES	Gibco/Invitrogen	15630	
EMEM-10% FBS (EMEM-10%)			Supplement EMEM with heat-inactivated FBS to 10% serum, sterile-filter
EMEM-20% FBS + supplements (EMEM-20%+S)			Supplement EMEM to final concentrations: heat-inactivated FBS, 20%; 1X amino acids; 2 mM L-glutamine; 10 mM HEPES; sterile-filter
24-well Transwell plates	Corning Costar	3472	3 µm pore size, polyester
Trypan blue	Gibco/Invitrogen	15250	
Ethanol	Sigma	E7023	Prepare to 70% using sterile dH ₂ O
Dulbecco's PBS (D-PBS)	Invitrogen	14040	
Non-fluorescent buffer			118 mM NaCl; 4.75 mM KCl; 2.53 mM CaCl ₂ ×H ₂ O; 2.44 mM MgSO ₄ ; 1.19 mM KH ₂ PO ₄ ; 25 mM NaHCO ₃ in sterile water; sterile-filter
Sodium fluorescein	Sigma	6377	1 mg/ml in sterile non-fluorescent buffer; sterile-filter, protect from light; store at 4 °C up to 6 months
EQUIPMENT			
Voltohmeter	World Precision Instruments		
STX2 electrode	World Precision Instruments		
ELISA plate reader			Capable of measuring A ₄₉₆ or A ₄₉₀