

Testing Epithelial Permeability in Fetal Tissue-Derived Enteroids

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Materials

Name	Company	Catalog Number	Comments
Amphotericin 250 uL/mL	Gibco	15-290-026	
Anti-CDX-2 [CDX2-88] 0.5mL concentrated Mouse, IgG, monoclonal	Biogenex	MU392A-5UC	
Anti-Claudin 2 antibody (ab53032)	abcam	ab53032	
Anti-Claudin 3 antibody (ab15102)	abcam	ab15102	
Anti-LYZ antibody produced in rabbit	Millipore Sigma	HPA066182-100UL	
Anti-Mucin 2/MUC2 Antibody (F-2): sc-515032	Santa Cruz	sc-515032	
Anti-Villin, Clone VIL1/4107R 0.5mL concentrated Rabbit, IgG, monoclonal	Biogenex	NUA42-5UC	
Bovine Serum Albumin (BSA)	Millipore Sigma	A8806	
Cell culture plates, CytoOne 12-well non-treated plates	USA Scientific Inc	50-754-1395	
Cell culture plates, CytoOne 6-well non-treated plates	USA Scientific Inc	50-754-1560	
Centrifuge with 15 mL tube buckets	Eppendorf	05-413-110	
CHIR 99021	Tocris Bioscience	4423	
Confocal microscope	Olympus FV1200	N/A	Or a similar microscope
Conical centrifuge tubes, 15 ml	Falcon	05-527-90	
Cover glass for microscope slides	Fisher Scientific	12-544-DP	
Disposable scalpels	Mopec	22-444-272	
Dmidino-2-phenylindole (DAPI) Solution (1 mg/mL)	Fisher Scientific	62248	
Dulbecco's Phosphate-buffered Saline (DPBS, 1X)	Fisher Scientific	AAJ67802K2	
Ethylene glycol-bis(β-aminoethyl ether)-N,N,N',N'-tetraacetic acid tetrasodium salt (EGTA)	Millipore Sigma	E8145-10G	

Fluorescein isothiocyanate dextran (Dextran-FITC) 4 kDa	Millipore Sigma	46944	
Fluorescence microplate reader	Agilent BioTek	Synergy HTX	
Gentamicin 50 mg/mL	Gibco	15-750-060	
Glass capillary tubes, single-barrel borosilicate, 1x0.5mm, 6" (cut in half before pulling)	A-M systems	626500	
Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 594	Fisher Scientific	A32742	
Goat anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488	Fisher Scientific	A32731	
Goat Serum	Fisher Scientific	16210064	
ImageJ software	NIH	N/A	https://imagej.nih.gov/ij/download.html
IntestiCult Organoid Growth Medium (Human)	Stem Cell Technologies	06010	
Lipopolysaccharides from Escherichia coli O111:B4	Millipore Sigma	L4391-1MG	
Magnetic stand	World Precision Instruments	M10	
Matrigel Basement Membrane Matrix, LDEV-free, 10 mL	Corning	354234	protein concentration > 9 mg/mL preferably
Micro forceps	Fisher Scientific	13-820-078	
Micro scissors	Fisher Scientific	08-953-1B	
Micromanipulator	World Precision Instruments	M3301	
Micropipette puller	World Precision Instruments	SU-P1000	Or a similar equipment
Microscope slides	Fisher Scientific	22-034486	
Occludin Polyclonal Antibody	Fisher Scientific	71-1500	
Paraformaldehyde 32% aqueous solution	ELECTRON MICROSCOPY SCIENCES	RT 15714	
Petri Dishes, 35x10 mm	Fisher Scientific	150318	
Petri Dishes, 60x15 mm	Fisher Scientific	12-565-94	
Phosphate Buffered Saline (PBS)	Fisher Scientific	10010031	
PicoPump foot switch	World Precision Instruments	3260	
Pipette tips, non-filtered, 1000 uL	Fisher Scientific	21-402-47	
Pipette tips, non-filtered, 20 uL	Fisher Scientific	21-402-41	
Pipette tips, non-filtered, 200 uL	Fisher Scientific	21-236-54	
Pneumatic PicoPump system	World Precision Instruments	SYS-PV820	or a similar picopump system
Primocin 50 mg/mL, 10x1 ml vial	InvivoGen	ant-pm-1	
Steel base plate	World Precision Instruments	5052	
Stereo microscope	Zeiss stemi 350		Or a similar microscope
ThermoSafe PolarPack Foam Bricks	Sonoco	03-531-53	
Triton X-100	Millipore Sigma	T8787	
Wall air supply	N/A	N/A	
Y-27632 dihydrochloride	Tocris Bioscience	1254	
ZO-1 Polyclonal Antibody	Fisher Scientific	61-7300	