

Materials List for

Organoid-Derived Epithelial Monolayer: A Clinically Relevant In Vitro Model for Intestinal Barrier Function

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Materials

Name	Company	Catalog Number	Comments
100% ethanol	Fisher Emergo	10644795	
1250, 300, and 20 µL low-retention filter-tips	Greiner bio-one	732-1432 / 732-1434 / 732-2383	
15 mL conical tubes	Greiner bio-one	188271	
24-well cell culture plates	Greiner bio-one	662160	
24-well HTS Fluoroblok Transwell plate (light-tight)	Corning	351156	
24-well HTS Transwell plates (Table 1)	Corning	3378	
24-well plate with Transwell inserts	Corning	3470	
40 µm cell strainer	PluriSelect	43-50040-01	
50 mL conical tubes	Greiner bio-one	227261	
6-well cell culture plates	Greiner bio-one	657160	
96-well black plate transparent bottom	Greiner bio-one	655090	
96-well fast thermal cycling plates	Life Technologies Europe BV	4346907	
96-well HTS Fluoroblok Transwell plate	Corning	351162	
96-well HTS Transwell plates (Table 1)	Corning	7369	
96-well transparent culture plate	Greiner bio-one	655180	
A83-01	Bio-Techne Ltd	2939	
Accutase Cell Dissociation Reagent	Life Technologies Europe BV	A11105-01	Cell dissociation reagent 2
Advanced DMEM/F-12	Life Technologies Europe BV	12634028	
B27 supplement	Life Technologies Europe BV	17504001	
Cell culture microscope (light / optical microscope)	Leica		
CellTiter-Glo	Promega	G9683	

Centrifuge	Eppendorf		
CO ₂ incubator	PHCBI		
DAPT	Sigma-Aldrich	D5942	
DEPC treated H ₂ O	Life Technologies Europe BV	750024	
Dulbecco's phosphate-buffered saline (DPBS) with Ca ²⁺ and Mg ²⁺	Life Technologies Europe BV	14040091	
DPBS, powder, no calcium, no magnesium	Life Technologies Europe BV	21600069	
EnzChek Lysozyme Assay Kit	Life Technologies Europe BV	E22013	
EVOM2 meter with STX electrode	WTI		
Gastrin	Bio-Techne Ltd	3006	
Glass pipettes	Volac		
GlutaMAX	Life Technologies Europe BV	35050038	
hEGF	Peprtech	AF-100-15	
HEPES	Life Technologies Europe BV	15630056	
Human Noggin	Peprtech	120-10C	
Human Rspo3	Bio-Techne Ltd	3500-RS/CF	
IWP-2	Miltenyi Biotec	130-105-335	
Ki67 primary antibody	Sanbio	BSH-7302-100	
Ki67 secondary antibody	Agilent	K400111-2	
Kova International Glasstic Slide with Counting grids	Fisher Emergo	10298483	
Laminar flow hood	Thermo scientific		
Lucifer Yellow CH dilithium salt	Sigma-Aldrich	L0259	
Matrigel, Growth Factor Reduced (GFR)	Corning	356231	extracellular matrix (ECM)
MicroAmp Fast 8-Tube Strip, 0.1 mL	Life Technologies Europe BV	4358293	
MicroAmp Optical 8-Cap Strips	Life Technologies Europe BV	4323032	
Microcentrifuge tubes	Eppendorf	0030 120 086	
Micropipettes (1000, 200, and 20 µL)	Gilson		
Microtome	Leica		
MUC2 primary antibody	Santa Cruz Biotechnology	sc-15334	
MUC2 secondary antibody	VWR	VWRKS/DPVR-HRP	
Multichannel pipette (200 µL)	Gilson		
N-acetylcysteine	Sigma-Aldrich	A9165	
NGS Wnt	U-Protein Express	N001-0.5mg	
Nicotinamide	Sigma-Aldrich	N0636	
Oligonucleotide ALP11/Forward	Custom-made	GGAGTTATCCTGCTCCCCAC	
Oligonucleotide ALP11/Reverse	Custom-made	CTAGGAGGTGAAGGTCCAACG	
Oligonucleotide LGR5/Forward	Custom-made	ACACGTACCCACAGAAGCTC	
Oligonucleotide LGR5/Reverse	Custom-made	GGAATGCAGGCCACTGAAAC	
Oligonucleotide MUC2/Forward	Custom-made	AGGATCTGAAGAAGTGTGTCACTG	
Oligonucleotide MUC2/Reverse	Custom-made	TAATGGAACAGATGTTGAAGTGCT	
Oligonucleotide TBP/Forward	Custom-made	ACGCCGAATATAATCCCAAGCG	
Oligonucleotide TBP/Reverse	Custom-made	AAATCAGTGCCGTGGTTCGTG	
Optical adhesive covers	Life Technologies Europe BV	4311971	
PD0325901	Stemcell Technologies	72184	
Penicillin/streptomycin	Life Technologies Europe BV	15140122	

Plate shaker	Panasonic		
PowerUp SYBR Green Master Mix	Fisher Emergo	A25776	
Primocin	InvivoGen	ANT-PM-2	antimicrobial formulation for primary cells
Qubit RNA HS Assay Kit	Life Technologies Europe BV	Q32852	
Reagent reservoir for multichannel pipet	Sigma-Aldrich	CLS4870	
REMS AutoSampler with 24-probe or 96C-probe	WTI		
Richard-Allan Scientific Alcian Blue/PAS Special Stain Kit	Thermo scientific	87023	
RNase-Free DNase Set	Qiagen	79254	
RNeasy Mini Kit	Qiagen	74106	
SB202190	Sigma-Aldrich	S7076	
Serological pipettes	Greiner bio-one	606180 / 607180 / 760180	
Serological pipettor (Pipet-Aid)	Drummond		
Single edge razor blade	GEM Scientific		
Superscript 1st strand system for RT-PCR	Life Technologies Europe BV	11904018	
Tecan Spark 10M plate reader	Tecan		
Trypan Blue Solution, 0.4%	Life Technologies Europe BV	15250-061	
TrypLE Express Enzyme (1x)	Life Technologies Europe BV	12605-010	Cell dissociation reagent 1
Water bath	Grant		
Y27632 (ROCK inhibitor)	AbMole	M1817	