

Materials List for

Establishment and Culture of Patient-Derived Breast Organoids

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Materials

Name	Company	Catalog Number	Comments
15 mL conical tubes	VWR	525-1068	
175 cm ² tissue culture flask	VWR (Corning)	29185-308	
37 °C bead bath			
37 °C CO ₂ incubator			
50 mL conical tubes	VWR	525-1077	
50 mL vacuum filtration system (0.22 µm Filter)	Millipore Sigma	SCGP00525	SCGP00525
500 mL Rapid-Flow Filter Unit, 0.2 µm aPES membrane, 75 mm diameter	Nalgene	566-0020	
6-well culture plates	Greiner Cellstar	82050-842	
75 cm ² tissue culture flask	VWR (Corning)	29185-304	
96-well opaque plates	Corning	353296	For CTG assay
A83-01	Tocris	2939	
Advanced DMEM/F12	Gibco	12634-010	
B-27 supplement	Life Technologies	12587010	
BioTek Synergy H4 Hybrid Microplate Reader	Fisher Scientific (Agilent)		For dual luciferase assay and CTG assay
BSA fraction V (7.5%)	Thermo Fisher	15260037	
Cell Titer-Glo (CTG) Reagent	Promega	G9683	luminescent cell viability assay
Centrifuge	Eppendorf	5804	
Collagenase from Clostridium histolyticum	Millipore Sigma	C5138	Type IV
Cryolabels	Amazon	DTCR-1000	Direct Thermal Cryo-Tags, White, 1.05 x 0.5"
Cryovials	Simport Scientific Inc.	T311-1	
Countess 3 Automated Cell Counter	Thermo Fisher	AMQAX2000	
DMEM, high glucose, pyruvate	Thermo Fisher (Gibco)	11995040	
Dual Luciferase Reporter Assay System	Promega	E1910	

Dulbecco's Phosphate Buffered Saline (1X)	Gibco	14190-144	DPBS
Epidermal growth factor (hEGF)	Peprtech	AF-100-15	
Fetal Bovine Serum (FBS)	Corning	35-010-CV	
FGF-10 (human)	Peprtech	100-26	
FGF-7/KGF (human)	Peprtech	100-19	
GlutaMax	Life Technologies	35050061	
HEK293T cells	ATCC	CRL-3216	For TOPFlash Assay
HEK293T-HA-Rspondin1-Fc cells	R&D Systems	3710-001-01	Cultrex HA-R-Spondin1-Fc 293T Cells
HEPES	Life Technologies	15630-080	
Heregulin β -1 (human)	Peprtech	100-03	
Matrigel Growth Factor Reduced (GFR) Basement Membrane Matrix (~10 mg/mL protein concentration)	Corning	356231	Phenol-red free, LDEV-free; basement membrane matrix
Mr. Frosty Cell Freezing Container	Thermo Fisher	5100-0001	
Mycoplasma detection kit	Lonza	LT07-418	
N-acetyl-L-cysteine	Millipore Sigma	A9165	
Nalgene Rapid-Flow Sterile Disposable Filter Units with PES Membranes	Thermo Fisher	166-0045	
Nicotinamide	Millipore Sigma	N0636	
Noggin (human)	Peprtech	120-10C	
P1000, P200, P10 pipettes with tips			
p38 MAPK inhibitor (p38i) SB 202190	Millipore Sigma	S7067	
Parafilm			transparent film
Penicillin-Streptomycin	Life Technologies	15140122	
Plasmid1: pRL-SV40P	Addgene	27163	
Plasmid2: M51 Super 8x FOPFlash	Addgene	12457	
Plasmid3: M50 Super 8x TOPFlash	Addgene	12456	
pluriStrainer 200 μ m	pluriSelect	43-50200-01	
Primocin	Invivogen	ANT-PM-1	
Recovery Cell Culture Freezing Medium	Thermo Fisher (Gibco)	12648-010	cell freezing medium
Red Blood Cell lysis buffer	Millipore Sigma	11814389001	
R-spondin conditioned media	In-house or commercial from Peprtech	120-38	
Scalpel (No.10)	Sklar Instruments	Jun-10	
Shaker (Incu-shaker Mini)	Benchmark	H1001-M	
TGF- β receptor inhibitor A 83-01	Tocris	2939	
Trypan Blue Stain (0.4%)	Gibco	15250-061	
TrypLE Express Enzyme (1X), phenol red	Life Technologies	12605028	cell dissociation reagent
X-tremeGENE 9 DNA transfection reagent	Millipore Sigma	6365779001	
Y-27632 Dihydrochloride (RhoKi)	Abmole Bioscience	Y-27632	
Zeocin	Thermo Fisher	R25001	