Materials List for

Modeling Oral-Esophageal Squamous Cell Carcinoma in 3D Organoids

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Materials

Name	Company	Catalog Number	Comments
0.05% trypsin-EDTA	Thermo Fisher Scientific	25-300-120	
0.25% trypsin-EDTA	Thermo Fisher Scientific	25-200-114	
0.4% Trypan Blue	Thermo Fisher Scientific	T10282	
1 mL tuberculin syringe without needle	BD	309659	
1.5 mL microcentrifuge tube	Thermo Fisher Scientific	05-408-129	
100 µm cell strainer	Thermo Fisher Scientific	22363549	
15 mL conical tubes	Thermo Fisher Scientific	14-959-53A	
200 µL wide bore micropipette tips	Thermo Fisher Scientific	212361A	
21 G needles	BD	305167	
24 well plate	Thermo Fisher Scientific	12-556-006	
4-Nitroquinoline-1-oxide (4NQO)	Tokyo Chemical Industry	NO250	
50 mL conical tubes	Thermo Fisher Scientific	12-565-270	
6 well plate	Thermo Fisher Scientific	12556004	
70 µm cell strainer	Thermo Fisher Scientific	22363548	
99.9% ethylene propylene glycol	SK picglobal		
Advanced DMEM/F12	Thermo Fisher Scientific	12634028	
Amphotericin B	Gibco, Thermo Fisher Scientific	15290018	Stock concentration 250 µg/mL, final concentration 0.5 µg/mL
Antibiotic-Antimycotic	Thermo Fisher Scientific	15240062	Stock concentration 100x, final concentration 1x
B-27 supplement	Thermo Fisher Scientific	17504044	Stock concentration 50x, final concentration 1x

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Bacto agar	BD	214010	
CO_2 incubator, e.g.Heracell 150i	Thermo Fisher Scientific	51026406	or equivalent
Countess II FL Automated Cell Counter	Thermo Fisher Scientific	AMQAX1000	or equivalent
Cryovials	Thermo Fisher Scientific	03-337-7D	
DietGel 76A	Clear H2O	72-07-5022	
Dimethyl sulfoxide (DMSO)	MilliporeSigma	D4540	
Dispase	Corning	354235	Stock concentration 50 U/mL, final concentration 2.5–5 U/mL
Dissecting scissors	VWR	25870-002	
Dulbecco's phosphate-buffered saline (PBS)	Thermo Fisher Scientific	14190250	Stock concentration 1x
Fetal bovine serum (FBS)	HyClone	SH30071.03	
Forceps	VWR	82027-386	
Freezing container	Corning	432002	or equivalent
Gelatin	Thermo Fisher Scientific	G7-500	
GlutaMAX	Thermo Fisher Scientific	35050061	Stock concentration 100x, final concentration 1x
HEPES	Thermo Fisher Scientific	15630080	Stock concentration 1 M, final concentration 10 mM
Hot plate/stirrer	Corning	PC-420D	or equivalent
Lab Armor bead bath (or water bath)	VWR	89409-222	or equivalent
Laboratory balance	Ohaus	71142841	or equivalent
Matrigel basement membrane extract (BME)	Corning	354234	
Microcentrifuge Minispin	Eppendorf	22620100	or equivalent
Microcentrifuge tube rack	Southern Labware	0061	
N-2 supplement	Thermo Fisher Scientific	17502048	Stock concentration 100x, final concentration 1x
N-acetylcysteine (NAC)	Sigma-Aldrich	A9165	Stock concentration 0.5 M, final concentration 1 mM
Parafilm M wrap	Thermo Fisher Scientific	S37440	
Paraformaldehyde (PFA)	MilliporeSigma	158127-500G	
Pathology cassette	Thermo Fisher Scientific	22-272416	
Phase-contrast microscope	Nikon		or equivalent
Recombinant mouse epidermal growth factor (mEGF)	Peprotech	315-09-1mg	Stock concentration 500 ng/µL, final concentration 100 ng/mL
RN cell-conditioned medium expressing R-Spondin1 and Noggin (RN CM)	N/A	N/A	Available through the Organoid and Cell Culture Core upon request, final concentration 2%
Sorval ST 16R centrifuge	Thermo Fisher Scientific	75004380	or equivalent
Soybean trypsin inhibitor (STI)	MilliporeSigma	T9128	Stock concentration 250 µg/mL
ThermoMixer C	Thermo Fisher Scientific	14-285-562 PM	or equivalent
Y-27632	Selleck Chemicals	S1049	Stock concentration 10 mM, final concentration 10 µM

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