

Materials List for

Fabrication and Characterization of Colorectal Cancer Organoids from SW1222 Cell Line in Ultrashort Self-assembling Peptide Matrix

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jove.com/video/66060

Materials

Name	Company	Catalog Number	Comments
1x PBS	Gibco	14190144	
6-well plate, tissue culture treated	Corning	07-200-83	
10x PBS, no calcium, no magnesium	Gibco	70011044	
16% Formaldehyde (w/v), Methanol-free	Thermo Scientific	28906	
24-well plate, tissue culture treated	Corning	09-761-146	
96-well black plate, tissue culture treated	Corning	07-200-565	
alamarBlue Cell Viability Reagent	Invitrogen	DAL1025	
Anti-Ezrin antibody, rabbit monoclonal	Abcam	ab40839	Secondary used: anti-rabbit Dylight 633
Anti-pan Cadherin antibody, rabbit polyclonal	Abcam	ab16505	Secondary used: anti-rabbit Alexa 488
Anti-ZO1 tight junction antibody, goat polyclonal	Abcam	ab190085	Secondary used: anti-goat Alexa 488
BSA	Sigma-Aldrich	A9418	
Cellpose 2.0	NA	NA	Obtained from https://github.com/MouseLand/cellpose
Confocal Laser Scanning Microscope with Airyscan	ZEISS	LSM 880	
DAPI	Invitrogen	D1306	
Donkey anti-Goat IgG (H+L) Secondary Antibody, Alexa Fluor 488	Invitrogen	A-11055	
Glycine	Cytiva	GE17-1323-01	
Goat anti-Rabbit IgG (H+L) Secondary Antibody, Alexa Fluor 488	Invitrogen	A-11008	
Goat anti-Rabbit IgG (H+L) Secondary Antibody, DyLight 633	Invitrogen	35562	

Heat Inactivated Fetal Bovine Serum (HI FBS)	Gibco	16140071	
ImageJ 1.54f	NIH	NA	
IMDM	Gibco	12440079	
LIVE/DEAD Viability/Cytotoxicity Kit, for mammalian cells	Invitrogen	L3224	
Magnesium Chloride, hexahydrate (MgCl ₂ 6 H ₂ O)	Sigma-Aldrich	M2393	
Matrigel for Organoid Culture, phenol-red free	Corning	356255	Referred in the manuscript as Matrigel or basement membrane matrix.
Microscope, brightfield			
Microscope, EVOS	Thermo Scientific	EVOS M7000	
OriginPro 2023 (64-bit) 10.0.0.154	OriginLab Corp	NA	
Penicillin-Streptomycin (10,000 U/mL)	Gibco	15140122	
Peptide P (Ac,Ile,Ile,Phe,Lys,NH ₂)	Lab-made	NA	Can be custom-made by peptide manufacturers such as Bachem.
Peptide P1 (Ac, Ile, Ile, Phe, Lys, Gly, Gly, Gly, Arg, Gly, Asp, Ser, NH ₂)	Lab-made	NA	Can be custom-made by peptide manufacturers such as Bachem.
Peptide P2 (Ac, Ile,Ile,Phe,Lys,Gly,Gly,Gly,Ile,Lys,Val,Ala,Val,NH ₂)	Lab-made	NA	Can be custom-made by peptide manufacturers such as Bachem.
Rhodamine Phalloidin	Invitrogen	R415	
Round Cover Slip, 10 mm diameter	VWR	631-0170	
Scanning Electron Microscope	Thermo Fisher - FEI	TENEO VS	
Sterile 30 µm strainer	Sysmex	04-004-2326	
sucrose	Sigma-Aldrich	S1888	
SW1222 cell line	ECACC	12022910	
Triton x-100	Thermo Scientific	85111	
Trypsin-EDTA 0.25%	Gibco	25200056	
Tween 20	Sigma-Aldrich	P1379	
UltraPure water	Invitrogen	10977015	