

A High-Throughput Platform for Culture and 3D Imaging of Organoids

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Materials

Name	Company	Catalog Number	Comments
2-Propanol	ThermoFisher scientific	AA19397K7	
Acetone	ThermoFisher scientific	AA19392K7	
BC43 Benchtop Confocal Microscope	Andor Technology		spinning disk confocal microscope
bovine serum albumin	ThermoFisher scientific	37525	
Buffered oxide etching solution	Merck	901621-1L	
CEE Spin Coater	Brewer Science	200X	
DAPI	ThermoFisher scientific	62248	
Developer AZ400K	Merck	18441223164	
DI Milliq water	Millipore		
Fetal Bovine Serum (FBS)	Invitrogen	10082147	
Glass coverslips	Marienfeld	117650	1.5H, round 25 mm diameter
Hepes	Invitrogen	15630080	
Imaris software	BitPlane		image analysis software
Inverted Transmission optical microscope	Nikon	TSF100-F	
Labsonic M	Sartorius Stedium Biotech		Ultrasonic homogenizer
Lipidure	NOF America	CM5206	bio-mimetic copolymer
NOA73	Norland Products	17-345	UV curable adhesive
Penicillin-Streptomycin	Invitrogen	15070063	
Phalloidin	ThermoFisher scientific	A12379	Alexa Fluor
Phosphate Buffer Solution	ThermoFisher scientific	10010023	
Photo Resist AZ5214E	Merck	14744719710	
Pico Plasma tool	Diener Electronic GmbH + Co. KG	Pico Plasma	For O ₂ plasma treatment
RapiClear 1.52	Sunjin lab	RC 152001	water-soluble clearing agent
RCT Hot Plate/Stirrer	IKA (MY)		

Reactive Ion Etching tool	Samco Inc. (JPN)	RIE-10NR	
RPMI 1640	Invitrogen	11875093	culture medium for HCT116 cells
Sylgard 184 Silicone Elastomer Kit	Dow Corning	4019862	Polydimethylsiloxane or in short, PDMS
Trichloro(1H,1H,2H,2H-perfluorooctyl)silane	Sigma Aldrich	448931-10G	
Triton X-100	Sigma Aldrich	T9284	surfactant
Trypsin EDTA	Thermofisher scientific	15400054	
Ultrasonic Cleaner	Branson	CPX2800	
UV-KUB 2	KLOE		UV-LED light source, 365 nm wavelength, 35 mW/cm ² power density
UV mask aligner	SUSS Microtec Semiconductor (DE)	MJB4	