

Materials List for:

Engineering Three-dimensional Epithelial Tissues Embedded within Extracellular Matrix

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Materials

Name	Company	Catalog Number	Comments
Polydimethylsiloxane (PDMS)	Ellsworth Adhesives	Sylgard 184	
PDMS curing agent	Ellsworth Adhesives	Sylgard 184	
Lithographically patterned silicon master	self-made	N/A	
Plastic weigh boat	Fisher Scientific	08-732-115	
100-mm-diameter Petri dishes	BioExpress	D-2550-2	
Ethyl Alcohol 200 Proof	Pharmco-Aaper	111000200	Make a 70% EtOH (v:v) solution by mixing with dH ₂ O
Razor blade	American Safety Razor	620179	
1:1 Dulbecco's Modified Eagle's Medium : Ham's F12 Nutrient Mixture (DMEM/F12) (1:1)	Hyclone	SH30023FS	
Fetal Bovine Serum (FBS)	Atlanta Biologicals	S11150H	
10x Hank's balanced salt solution (HBSS)	Life Technologies	14185-052	
Insulin	Sigma Aldrich	I6634-500MG	
Gentamicin	Life Technologies	15750-060	
10x Phosphate-buffered saline (PBS)	Fisher Scientific	BP399-500	
Sodium hydroxide (NaOH)	Sigma Aldrich	221465-500G	
Bovine type I collagen (non-pepsinized)	Koken	IAC-50	
Albumin from bovine serum (BSA)	Sigma Aldrich	A-7906	
Curved stainless steel tweezers	Dumont	7	
35-mm-diameter tissue culture dishes	BioExpress	T-2881-6	
15 ml conical tubes	BioExpress	C-3394-2	
1.5 ml Eppendorf Safe-Lock Tube	USA Scientific	1615-5500	
Circular #1 glass coverslips, 15-mm in diameter	Bellco Glass Inc.	Special order	
0.05% 1x Trypsin-EDTA	Life Technologies	25300-054	
Paraformaldehyde	VWR	100503-916	
Triton X-100	Perkin Elmer	N9300260	Detergent
HGF	Sigma Aldrich	H 9661	Resuspended in dH ₂ O at 50 mg/ml
Rabbit anti-mouse FAK antibody	Life Technologies	AMO0672	
Goat anti-rabbit Alexa 488 antibody	Life Technologies	A-11034	

Adobe Photoshop	Adobe	N/A	Used for color-coding pixel frequency maps.
FIJI (ImageJ)	NIH	N/A	Free image analysis software used for thresholding, registering, and overlaying images to create a pixel frequency map. The StackReg plugin was used for registering binary images.