

Materials List for:

Generation of a Three-dimensional Full Thickness Skin Equivalent and Automated Wounding

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Materials

Name	Company	Catalog Number	Comments
Trypsin EDTA (1:250) 0.5% in DPBS	PAA	L11-003	0.05%
Dulbecco's Phosphate Buffered Saline	Sigma	D8537	
Collagen (6 mg/ml in 0.1% acetic acid)	Produced in house		
Fibronectin Human Protein, Plasma (50 µg/ml)	Life Technologies	33016-015	
Inserts	Nunc	140627	
6 well plate	Nunc	140685	
24 well plate	Nunc	142485	
Microscope slides	R. Langenbrinck	03-0070	
Fibroblasts culturing (500 ml):			
DMEM, high glucose	Life Technologies	11965-092	89% (445 ml)
Fetal bovine serum	Bio & Sell	FCS.ADD.0500	10% (50 ml)
Penicillin-Streptomycin (10,000 U/ml)	Life Technologies	15140-122	1% (5 ml)
Keratinocytes culture medium (500 ml):			
Keratinocyte Growth Medium 2	Promocell	C-20111	89% (445 ml)
Keratinocyte Growth Medium 2 SupplementPack	Promocell	C-39011	
Penicillin-Streptomycin (10,000 U/ml)	Life Technologies	15140-122	1% (5 ml)
Gel neutralization solution (250 ml):			
Dulbecco's Modified Eagle Medium, high Glucose Powder with L-Glutamine	PAA	G0001,3010	93% (232.5 ml)
Chondroitin sulfate sodium salt from shark cartilage	Sigma	C4384-1g	1% (2.5 ml)
Fetal bovine serum	Bio & Sell	FCS.ADD.0500	3% (7.5 ml)
HEPES	Sigma	H3375-1kg	3% (7.5 ml)
Skin model submers medium (500 ml):			
Keratinocyte Growth Medium 2	Promocell	C-20111	
Keratinocyte Growth Medium 2 SupplementPack	Promocell	C-39011	

Fetal calf serum	Bio & Sell	FCS.ADD.0500	5%-2% (25 ml-10 ml)
Penicillin-Streptomycin (10,000 U/ml)	Life Technologies	15140-122	1% (5 ml)
Skin model air-liquid interface medium (500 ml):			
Keratinocyte Growth Medium 2			
Keratinocyte Growth Medium 2 Supplement Pack	Promocell	C-39011	adding only supplements: insulin, hydrocortisone, epinephrine, transferrin, CaCl ₂
Penicillin-Streptomycin (10,000 U/ml)	Life Technologies	15140-122	1% (5 ml)
CaCl ₂ (300 mM)	Sigma	C7902-500g	0.62% (3.1 ml)
Histology:			
IHC-Kit DCS SuperVision 2 HRP	DCS	PD000KIT	
Vimentin antibody	Abcam	ab92547	
CK14 antibody	Sigma	HPA023040-100µl	
CK10 antibody	Dako	M7002	
Filaggrin antibody	Abcam	ab81468	
H&E staining:			
Mayer's Haemalaun	AppliChem	A0884,2500	
Xylol	Sigma Aldrich	296325-4X2L	
Ethanol	Sigma Aldrich	32205-4X2.5L	
HCl	Sigma Aldrich	H1758-500ML	
Eosin	Sigma Aldrich	E4009-5G	
2-Propanolol	Sigma Aldrich	I9516-500ML	
Mounting Medium	Sigma Aldrich	M1289-10ML	