

Generation of a Simplified Three-Dimensional Skin-on-a-chip Model in a Micromachined Microfluidic Platform

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Materials

Name	Company	Catalog Number	Comments
Amchafibrin	Rottafarm		Tranexamic acid
Antibiotic/antimycotic	Thermo Scientific HyClone		
Calcium chloride	Sigma Aldrich		
Culture plates	Fisher		
DMEM	Invitrogen Life Technologies		
Double-sided tape vinyl	ATP Adhesive Systems		GM 107CC, 12 µm thick
Edge plotter	Brother		Scanncut CM900
FBS	Thermo Scientific HyClone		
Fibrinogen	Sigma Aldrich		Extracted from human plasma
Glass slide	Thermo Scientific		
GFP-Human dermal fibroblasts	-		Primary. Gift from Dr. Marta García
H2B-GFP-HaCaT cell line	ATCC		Immortalized keratinocytes. Gift from Dr. Marta García
Live/dead kit	Invitrogen		
PBS	Sigma Aldrich		
Polycarbonate membrane	Merk TM		5 µm pore size
Polydimethylsiloxane	Dow Corning		Sylgard 184
Sodium chloride	Sigma Aldrich		
Syringes	Terumo		5 mL
Thrombin	Sigma Aldrich		10 NIH/vial
Transparent adhesive vinyl	Mactac		JT 8500 CG-RT, 95 µm thick
Trypsin/EDTA	Sigma Aldrich		
Tubing	IDEX		Teflon, 1/16" OD, 0.020" ID