

Materials List for

Control of Cell Adhesion using Hydrogel Patterning Techniques for Applications in Traction Force Microscopy

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jove.com/video/63121

Materials

Name	Company	Catalog Number	Comments
3-(Trimethoxysilyl)propyl methacrylate	#440159	Sigma Aldrich	
Acetic acid	#33209	Honeywell	
Acrylamide 40 %	#1610140	Bio-Rad	CAUTION : toxic, work under a fume hood
AFM cantilever	#CP-CONT-BSG-A-G	NanoAndMore	5 µm spherical tip
AFM system	#NanoWizard3	JPK	Coupled to optical microscope equipped with 40x air objective and GFP filter
Ammonium persulfate	#A3678	Sigma	
Bis-acrylamide 2 %	#1610142	Bio-Rad	CAUTION : toxic, work under a fume hood
Camera sCMOS	#C11440-42U30	Hamamatsu	
Camera sCMOS	#ANDORZYLA4.2	Oxford Instrument	
CellRox	#C10422	Thermo Fisher	
Custom incubator chamber		EMBLEM	
Dental glue	#1300 100	Picodent	
DMEM	#41965	Thermo Fisher	
Epifluorescence microscope	#Eclipse Ti2E	Nikon	
Epifluorescence microscope	#Axiovert200	Zeiss	
Ethanol	#9065.3	Carl Roth	
FBS South America	#S181T	Thermo Fisher	
Fibrinogen	#F13191	Invitrogen	Alexa488 conjugate
Fibronectin	#F1141	Sigma	
Fluorescent beads 200 nm	#F8805	Invitrogen	Carboxylated (365/415)
Fluorescent beads 200 nm	#F8848	Invitrogen	Carboxylated (505/515)
Fluorescent beads 200 nm	#F8810	Invitrogen	Carboxylated (580/605)

Fluorescent beads 200 nm	#F8807	Invitrogen	Carboxylated (660/680)
Glass coverslip 15 mm round	#41001115	Assistent	
Glass coverslip 24 mm round	#41001124	Assistent	
Microscope Objective	#MRH08230	Nikon	20x air NA 0.45
Mouse Embryonic Fibroblasts	#CRL-2991	ATCC	
mPEG-SVA	#MPEG-SVA-5000	Laysan Bio	
N-Hydroxyethyl acrylamide	#697931	Aldrich	
Plasma cleaner	#100-E	TePla	
PLPP gel	#PLPPgel	Alveole	
Poly-L-lysine	#P4823	Sigma Aldrich	
Poly(L-lysine)-graft-poly(ethylene glycol)	#PLL(20-g[3.5]-PEG(2)	SuSoS	
Sodium(meta) periodate	#S1878	Sigma Aldrich	
TEMED	#17919	Thermo Scientific	
UV Patterning module	#PRIMO	Alveole	
UVO cleaner	#342-220	Jelight	