

Materials List for

Integrative Toolkit to Analyze Cellular Signals: Forces, Motion, Morphology, and Fluorescence

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Materials

Name	Company	Catalog Number	Comments
Reagents and components used in prepare glass surface for hydrogel coating			
(3-Aminopropyl)trimethoxysilane, 97%	Aldrich chemistry	13822565	
2% Bis Solution	Bio-rad	1610142	
3-(Trimethoxysilyl)propyl methacrylate,98%	Acros organics	2530850	
40% Acrylamide Solution	Bio-rad	1610140	
Glass bottom 35 mm dish/ 6 or 12 or 24 well plates	MatTek or CellVis		
Glutaraldehyde, EM Grade, 25%	Polysciences	1909100	
Sodium Hydroxide	Sigma-aldrich	1002074706	
Reagents and components used in preparing suitable hydrogel			
2% Bis Solution	Bio-rad	1610142	
40% Acrylamide Solution	Bio-rad	1610140	
Ammonium Persulfate	Bio-rad	1610700	
Cover Slips	Electron Microscopy Sciences	7222301	
Dulbecco's Phosphate Buffered Saline (1M)	Gibco	14190136	
FluoSpheres carboxylate 0.2 um, yellow-green(505/515)	Invitrogen	F8811	

FluoSpheres carboxylate 0.5 um, red(580/605)	Invitrogen	F8812	
FluoSpheres carboxylate 2.0 um, red(580/605)	Invitrogen	F8826	
Rain-X			
TEMED	Bio-rad	1610801	
Reagents used in coating extracellular matrix on the hydrogel			
Collagen Type I Rat Tail	Corning	354236	
HEPES(1M)	Gibco	15630080	
Phosphate Buffered Saline (1M)	Gibco	10010023	
Sulfo-SANPAH	CovaChem	102568434	
Microscope hardware used in the current study			
Camera	Hamamatsu Flash 4.0 LT sCMOS Camera	C11440-42U	
H117 ProScan™ Stages	Prior Scientific		
Light source- Lambda DG4 and Lambda DG5	Sutter instrument company		
Microscope	Nikon eclipse TE2000-S	550372	
ProScan III Universal Microscope Automation Controller	Prior Scientific		
Stagetop incubator	ibidi	11922	
Stepper Motor Focus Drive	Prior Scientific		