

The Mechanics of (Poro-)Elastic Contractile Actomyosin Networks As a Model System of the Cell Cytoskeleton

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Materials

Name	Company	Catalog Number	Comments
(3-Mercaptopropyl)trimethoxysilane	Sigma-Aldrich Company	175617	Stored under Argon atmosphere at 4 °C
Acetic acid	Bio-Lab Ltd	1070521	
Alexa-Fluor 488	Invitrogene	A10254	Diluted with DMSO, stored under Argon atmosphere at -20 °C
Alexa-Fluor 647	Invitrogene	A20347	Diluted with DMSO, stored under Argon atmosphere at -20 °C
BSA	Sigma -Aldrich Company	A3059	Stored at 4 °C
Catalase	Sigma -Aldrich Company	C9322	The stock bottle is kept under dry atmosphere (silica gel) at -20 °C
Coverslips	Mezel-glaser	CG2222-1.5	Kept in milliQ-water after the Piranha treatment and used within 3 weeks
Creatine kinase	Roche Life Science Products	10736988001	Prepared fresh in glycine buffer, kept on ice, and used within 3 days. The stock bottle is kept under dry atmosphere (silica gel) at 4 °C
Creatine phosphate	Roche Life Science Products	10621714001	When dissolved should be kept at -20 °C and used within 3 months. The stock bottle is kept under Argon atmosphere and stored at 4 °C
DTT	Roche Life Science Products	10708984001	When dissolved should be kept at -20 °C and used within 3 months
Dual view Simultaneous Imaging System	Photometrics	DV2-CUBE	
EGTA	MP Biomedicals	195174	
EM-CCD Camera	Andor Technology Ltd	DV 887	
EM-CCD Camera	Photometrics	Evolve Delta	
Ethanol	Bio-Lab Ltd	525050300	
Flourescence Lamp	Rapp Optoelectronic		
Fluoresbrite YG Microspheres	Polysciences	17151-10	200 nm diameter
Glucose	ICN Biomedicals Inc	194024	When dissolved should be kept at -20 °C and used within 3 months.

Glucose oxidase	Sigma-Aldrich Company	G7141	Kept in -20 °C and used within 3 months. The stock powder is kept under Argon atmosphere and kept at -20 °C
Glycerol	ICN Biomedicals Inc	800687	
Glycine	MP Biomedicals	808822	
Hydrogen Peroxide	Sigma-Aldrich Company	216763	Stored at 4 °C
KCl	EMD Millipore Corp.	529552	
Methanol	Bio-Lab Ltd	1368052100	
MgCl ₂	EMD Millipore Corp.	442615	
Microscope	Leica Microsystems	DMI3000	
mPEG-mal	Nanocs	PG1-ML-5k	Mw = 5000 Da. Divided to small batches by weight. Stored under Argon atmosphere at -20 °C
Nile red microspheres	Spherotech	FP-2056-2	2300 nm diameter
Objective (10x)	Leica Germany	HC PL AP0	UPlanFL Numerical Aperture = 0.3
Objective (2.5x)	Leica Germany	506304	Plan-NEOFLUAR Numerical Aperture = 0.075
Oven	WTC Binder		
Parafilm	Ancor	PM-996	
PBS Buffer	Sigma-Aldrich Company	P4417	
Shutter Driver	Vincet Associates	VMM D1	
Silica gel	Merck	1.01907.5000	
Sonicator	Elma	Elmasonic P	
Sulfuric acid	Carlo Erba reagents	410301	
DV2 Dual-Channel Simultaneous-Imaging System	Photometrics		
TRIS	MP Biomedicals	819620	
UV-VIS Spectrophotometer	Pharmacia	Ultraspec 2100 pro	
MICROMAN E	Gilson	FD10001	1–10 uL
MATLAB R2017b	MathWorks		Data quantification
MetaMorph	Molecular devices		Control software of the optical imaging system; data quantification (particle tracking analysis, network mesh size)