

# Pattern Generation for Micropattern Traction Microscopy

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jove.com/video/63628

## Materials

Name	Company	Catalog Number	Comments
(3-aminopropyl)trimethoxysilane	Sigma Aldrich	#281778	
1.5 mL Microcentrifuge tube	Fisher Scientific	#05-408-129	
15 mL conical tube	Fisher Scientific	#05-539-12	
4 x 4 in 0.060 Quartz LR Chrome Photomask	Advance Reproductions Corporation	N/A	Custom-designed mask
6 Well Plates	Fisher Scientific	#07-200-83	
Acetone	Fisher Scientific	#A18P-4	
Acrylamide Solution, 40%	Sigma Aldrich	#A4058	
AlexaFluor 488	Thermo Fisher	#A20000	
Aminonium Persulfate	Fisher Scientific	#BP179-25	
Bisacrylamide	Fisher Scientific	#PR-V3141	
Ethanol	Greenfield Global	#111000200C1GL	
Glass Coverslips, 25 mm round	Fisher Scientific	#12-545-102	
Glass Coverslips, 30 mm round	Warner	#64-1499	
Hamamatsu ORCA-R2 Camera	Hamamatsu	#C10600-10B	
Human Plasma	Valley Biomedical	#HP1051P	Used to isolate fibronectin
Hydrochloric Acid, 1.0 N	Millipore Sigma	#1.09057	
ImageJ	Wayne Rasband	#1.53n	
Interchangeable Coverslip Dish Set	Biopetechs	#190310-35	
Kim Wipes	Fisher Scientific	#06-666-11C	
Mask Alinger	Karl Suss	#MA6	
Matlab 2021	Mathworks	#R2021a	
MetaMorph Basic	Molecular Devices	#v7.7.1.0	
N-hydroxysuccinimide ester	Sigma Aldrich	#130672-5G	
NucBlue Live Cell Stain	Thermo Fisher	#R37605	
Olympus IX2-ZDC Inverted Microscope	Olympus	#IX81	
PD-10 Desalting Columns	GE Healthcare	#52-1308-00	
Photoresist Spinner Hood	Headway Research	#PWM32	
Plasma Cleaner	Harrick	#PDC-001	

Plasma Etcher	TePla	#M4L	
Prior Lumen 200Pro Light Source	Prior Scientific	#L200	
Silicon Wafers, 100 mm	University Wafer	#809	
SU-8 2005	Kayaku Advanced Materials Inc.	#NC9463827	
SU-8 Developer	Kayaku Advanced Materials Inc.	#NC9901158	
Sylgard 184 Silicone Elastomer	Essex Brownell	#DC-184-1.1	
Tetramethylethylenediamine	Fisher Scientific	#BP150-20	
Trichloro(1H,1H,2H,2H-perfluorooctyl)silane	Sigma Aldrich	#448931	
UAPON-40XW340 Objective	Olympus	#N2709300	
UV Flood Exposure	Newport	#69910	
Wafer Carrier Tray, 110 x 11 mm	Ted Pella, Inc.	#19395-40	