

Materials List for:

Probing Cell Mechanics with Bead-Free Optical Tweezers in the *Drosophila* Embryo

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Materials

Name	Company	Catalog Number	Comments
Ytterbium Fiber Laser LP, 10 W, CW	IPG Laser	YLM-10-LP-SC	including collimator LP: beam D = 1.6 mm and red guide laser
Ø1/2" Optical Beam Shutter	Thorlabs	SH05	
Small Beam Diameter Galvanometer Systems	Thorlabs	GVS001	1 for X displacement, 1 for Y displacement
1D or 2D Galvo System Linear Power Supply	Thorlabs	GPS011	galvanometers power supply
2 lenses f = 30 mm	Thorlabs	LB1757-B	relay telescope between 2 galva
Lens f = 200 mm	Thorlabs	LB1945-B	2.5X telescope
Lens f = 500 mm	Thorlabs	LB1869-B	2.5X telescope
Right-Angle Kinematic Elliptical Mirror Mount with Tapped Cage Rod Holes	Thorlabs	KCB1E	Periscope
Laser Safety Glasses, Light Green Lenses, 59% Visible Light Transmission, Universal Style	Thorlabs	LG1	
45° AOI, 50.0 mm Diameter, Hot Mirror	Edmund Optics	#64-470	
Multiphoton-Emitter HC 750/S	AHF	HC 750/SP	
CompactDAQ Chassis	National Instruments	cDAQ-9178	
C Series Voltage Output Module	National Instruments	NI-9263	Analog output module
C Series Voltage Input Module	National Instruments	NI-9215	Analog input module
FluoSpheres Carboxylate-Modified Microspheres, 0.5 µm, red fluorescent (580/605), 2% solids	ThermoFisher Scientific	F8812	calibration beads
C++ (Qt) home made optical tweezers software			developed by Olivier Blanc and Claire Chardès. Alternative solution: labview