

Materials List for

Optogenetic Inhibition of Rho1-Mediated Actomyosin Contractility Coupled with Measurement of Epithelial Tension in *Drosophila* Embryos

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Materials

Name	Company	Catalog Number	Comments
35 mm glass-bottom dish	MatTek	P35G-1.5-10-C	Used for sample preparation
60 mm × 15 mm Petri dish with lid	Falcon	351007	Used for sample preparation
Black cloth for covering the microscope	Online	NA	Used to avoid unwanted light stimulation
Clorox Ultra Germicadal Bleach (8.25% sodium hypochlorite)	VWR	10028-048	Used for embryo dechorination
CO ₂ pad	Genesee Scientific	59-114	Used for cross set-up
ddH ₂ O	NA	NA	Used for sample preparation
Dumont Style 5 tweezers	VWR	102091-654	Used for sample preparation
Eyelash tool (made from pure red sable round brush #2)	VWR	22940-834	Used for sample preparation
FluoView (Software)	Olympus	NA	Used for image acquisition and optogenetic stimulation
Halocarbon oil 27	Sigma Aldrich	H8773-100ML	Used for embryo stage visualization
ImageJ/FIJI	NIH	NA	Used for image analysis
MATLAB	MathWorks	NA	Used for image analysis
Nikon SMZ-745 stereoscope	Nikon	NA	Used for sample preparation
Olympus FVMPE-RS multiphoton microscope with InSight DS Dual-line Ultrafast Lasers for simultaneous dual-wavelength multiphoton imaging, , a 25x/ NA1.05 water immersion objective (XLPLN25XWMP2), and an IR/ VIS stimulation unit for photoactivation/stimulation. This system is also equipped with a TRITC filter (39005-BX3; AT-TRICT-REDSHFT 540/25x, 565BS, 620/60M), and a fluorescence illumination unit that emits white light.	Olympus	NA	Used for image acquisition and optogenetic stimulation



SP Bel-Art 100-place polypropylene freezer storage box (Black, light-proof box for sample transfer)	VWR	Used to avoid unwanted light stimulation
UV Filter Shield for FM1403 Fluores (Orange-red plastic shield)	Bolioptics	Used to avoid unwanted light stimulation
VITCHELO V800 Headlamp with White and Red LED Lights	Amazon	Used to avoid unwanted light stimulation