

Materials List for:

Constructing a Low-budget Laser Axotomy System to Study Axon Regeneration in *C. elegans*

Wes Williams¹, Paola Nix¹, Michael Bastiani¹

¹Department of Biology, University of Utah

Correspondence to: Michael Bastiani at mike.bastiani@gmail.com

URL: <https://www.jove.com/video/3331>

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Materials

Name	Company	Catalog Number	Comments
Name of the reagent	Company	Catalogue number	Comments (optional)
535 nm Laser	Crylas	FDSS532Q3	(TEEM, Crystal, and CRC also offer comparable lasers)
All optics and hardware			(Thor offers comparable optics and hardware)
SUPREMA Optical Mount, 1.0-in diameter	Newport Corp.	SS100-F2KN	2
1" diameter post, 1" height	Newport Corp.	PS-1	1
1" diameter post fork	Newport Corp.	PS-F	1
Achromatic Zero-Order Wavel Plate, ½ Wave Retardation, 400-700nm	Newport Corp.	10RP52-1	1
Rotation Stage, 1" Aperature	Newport Corp.	RSP-1T	1
1" diameter post, 1" height	Newport Corp.	PS-1	1
1" diameter post fork	Newport Corp.	PS-F	1
Glan-Laser Calcite Polarizer, 430-700nm	Newport Corp.	10GL08AR.14	1
Polarizer Rotation Mount	Newport Corp.	RM25A	1
¼" spacer for 1" diameter post	Newport Corp.	PS-0.25	1
½" height, 1"diameter post	Newport Corp.	PS-0.5	1
Fork, 1" diameter post	Newport Corp.	PS-F	1
Beam Dump	Newport Corp.	PL15	1
Microscope Objective Lens Mount	Newport Corp.	LH-OBJ1	1
1" diameter post, 1" height	Newport Corp.	PS-1	1
1" diameter post fork	Newport Corp.	PS-F	1
High-Energy Nd:YAG Laser Mirror, 25.4 mm Diameter, 45°, 532 nm	Newport Corp.	10Q20HE.2	4
SUPREMA Optical Mount, 1.0 inch diameter, clearance mounting hole	Newport Corp.	SN100C-F	2
High Precision Knob Adjustment Screw, 12.7mm travel, 100TPI	Newport Corp.	AJS100-0.5K	4
Thread adaptor, ¼-20 male, 8-32 female	Newport Corp.	SS-1-B	2
Rod Clamp for 1.5 inch diameter rod	Newport Corp.	340-RC	2
Rod, 14 inch (35.5 cm) tall	Newport Corp.	40	1
Rail carrier for X26, square 40mm length	Newport Corp.	CN26-40	4

Steel Rail, 384mm (15") length	Newport Corp.	X26-384	1
Rod Platform for 1.5 inch diameter rod	Newport Corp.	300-P	2
Rod, 14 inch (35.5 cm) tall	Newport Corp.	40	2
Plano-Concave Lens, 12.7mm diameter, -25mm EFL, 430-700nm	Newport Corp.	KPC025AR.14	2
Plano-Convex Lens, 25.4mm diameter, 50.2mm EFL, 430-700nm	Newport Corp.	KPX082AR.14	1
Plano-Convex Lens, 25.4mm diameter, 62.9mm EFL, 430-700nm	Newport Corp.	KPX085AR.14	1
Fixed Lens Mount, 0.5" diameter, 1.0" Axis height	Newport Corp.	LH-0.5	2
Fixed Lens Mount, 1.0" diameter, 1.0" Axis height	Newport Corp.	LH-1	2
Microspheres 0.1um	Polysciences, Inc.	00876	
Agarose	Research Products International Corp.	A20090	EEO matters
Muscimol	Sigma-Aldrich	M1523	