

Materials List for:

# Local Field Fluorescence Microscopy: Imaging Cellular Signals in Intact Hearts

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## Materials

Name	Company	Catalog Number	Comments
Sodium chloride	Sigma	7647-14-5	
D-(+)-glucose	Sigma	50-99-7	
Potassium chloride	Sigma	7447-40-7	
HEPES	Sigma	7365-45-9	
Sodium phosphate	Sigma	10049-21-5	
Calcium chloride solution	Sigma	10043-52-4	
Magnesium chloride solution	Sigma	7786-30-3	
Sodium hydroxide	Sigma	S-8045	
0.2 µm nylon membrane filter	Whatman	7402-004	
Manifold MPP	Warner	64-0216	
21G1.5 Precision glide needle	B-D	305167	
Black Braided silk string (non-absorbable surgical suture)	AllMech Tech	LOOK-SP105	
Heparin sodium injection 1000USP/mL	AllMech Tech	NDC63323-540-11	
DMSO D8779	Sigma	67-68-5	
Blebbistatin	Sigma	856925-71-8	
Pluronic F-127 20% solution	Biotium	59004	
Materflex C/L peristaltic pump	Cole-Parmer	77122-26	
Isostim stimulator	World Precision Instruments	A320RC	
Waveform generator	Teledyne Lecroy	WaveStation 2012	
Ultrasonic cleaner FS20	Fisher Scientific	1533530	
Tygon tubing ID:1/32" OD:3/32" Wall 1/32"	Component Supply	TET-031A	
Tygon tubing ID:3/32" OD:5/32" Wall 1/32"	Component Supply	TET-094A	
Adapter luer lock to 3-way valve	Cole-Parmer	EW-31200-80	
Tee adapters and plastic fittings	Cole-Parmer	6365-90	
Plastic clamp	WaterZoo	2465	
Peltier	TE Technology	TE-127-2.0-2.5	
Rhod-2AM	ThermoFisher Scientific	R1245MP	

Di-8-ANEPPS	ThermoFisher Scientific	D3167	
Mag-Fluo-4AM	ThermoFisher Scientific	M14206	
Acupuncture needles	LHASA	TC1.20x13	
60 mL BD syringe with luer-lok	Fisher Scientific	14-820-11	
LabView	National Instruments		
Speed vacuum Eppendorf Vagufuge	Fisher Scientific	07-748-13	
Digital signal processing circuit DSP TMS 320	Texas Instrument		
Longpass Dichroic mirror 567 nm	ThorLabs	DMLP567L	
Objective 10X NA 0.25 DIN AchromaticFinite Intl Standard Objective	Edmund Optics	Stock# 33-437	
Objective 20X NA 0.40 DIN Achromatic Finite Intl Standard Objective	Edmund Optics	Stock# 33-438	
Longpass colored glass filter 590 nm	ThorLabs	FGL590	
Green Nd-YAG laser 532 nm, 500 mW			
Micromanipulator for laser	Siskiyou	MX130R	
Multimode fiber optic 200 $\mu$ m NA 0.39	ThorLabs	FT200UMT	
LEDs blue	Lumileds	L135-B475003500000	
LEDs green	Lumileds	L135-G525003500000	
Cube beam splitter, non-polarizing	ThorLabs	BS007	
36" Length, Dovetail Optical Rail	Edmund Optics	54-402	
2.5" Width, Dovetail Carrier	Edmund Optics	54-404	
0.75" Travel, micrometer stage	Edmund Optics	37-983	
Dovetail optical rail 3"	ThorLabs	RLA075/M	
Dovetail rail carrier 1"	ThorLabs	RC1	
Avalanche photodiode Helix 902	Digi-Key	HELIX-902-200	
Objective holder XY Translator	ThorLabs	ST1XY-S	
Aluminum breadboard 6" x 6"	ThorLabs	MB6	
Nexus optical table 4' x 6'	ThorLabs	T46HK	
Stainless steel cap screws	ThorLabs	HW-KIT5/M	
Acrylic sheet	Home Depot/Lowes		
Sylgard Silicone elastomer kit	Dow Corning	Sylgard 184	
Epoxy gel	Walmart/Home Depot	2-part 5 min clr 1oz	
21G1.5 Precision glide needle	B-D	305167	
23G Precision glide needle	B-D	305145	
Mounting base, 25 mm x 75 mm x 10 mm	ThorLabs	BA1/M	
Wire shelf posts 36"	Alera	AALESW59PO36SR	
Wire shelves	Alera	ALESW582424SR	
Post and angle clamp	ThorLabs	SWC/M-P5	
Glass syringe for dye chamber	Wheaton	W851020	
Rubber stopper	Home Science Tools	CE-STOP01C	