

Materials List for

# Light-Sheet Imaging to Reveal Cardiac Structure in Rodent Hearts

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jove.com/video/66707

## Materials

Name	Company	Catalog Number	Comments
<b>1% Agarose</b>			
Low melting point agarose	Thermo Fisher	16520050	
Deionized water	-	-	
<b>Chemicals for tissue clearing</b>			
5-Amino-1,3,3-trimethylcyclohexanemethylamine, mixture of cis and trans	Sigma-Aldrich	118184	
D.E.R. <sup>™</sup> 332	Sigma-Aldrich	31185	
D.E.R. <sup>™</sup> 736	Sigma-Aldrich	31191	
Dibenzyl ether (DBE)	Sigma-Aldrich	33630	
Dichloromethane (DCM)	Sigma-Aldrich	270997	
Fluorescent beads	Spherotech	FP-0556-2	
Hydrogen peroxide (H <sub>2</sub> O <sub>2</sub> )	Sigma-Aldrich	216736	
Methanol	Sigma-Aldrich	439193	
Paraformaldehyde (PFA)	Thermo Fisher	47392	
Phosphate Buffered Saline (PBS)	Sigma-Aldrich	79383	
Potassium Chloride (KCl)	Sigma-Aldrich	P3911	
<b>Software and algorithms</b>			
Amira	Thermo Fisher Scientific	2021.2	
BigStitcher	Hörl et al. <sup>22</sup>		
Fiji-ImageJ	Schindelin et al. <sup>20</sup>	1.54f	
HCIImage Live	Hamamatsu Photonics	4.6.1.2	
LabVIEW	National Instruments Corporation	2017 SP1	
<b>Key components of the customized light-sheet system</b>			
0.63 - 6.3X Zoom body	Olympus	MVX-ZB10	
10X Illumination objective	Nikon	MRH00105	

1X detection objective	Olympus	MV PLAPO 1X/0.25	
473nm DPSS Laser	Laserglow Technologies	LRS-0473-PFM-00100-05	
532nm DPSS laser	Laserglow Technologies	LRS-0532-PFM-00100-05	
589 nm DPSS laser	Laserglow Technologies	LRS-0589-GFF-00100-05	
BNC connector	National Instrument	BNC-2110	
Cylindrical lens	Thorlabs	ACY254-050-A	
DC-Motor Controller, 4 axes	Physik Instrumente	C-884.4DC	
ETL	Optotune	EL-16-40-TC-VIS-5D-1-C	
ETL Cable	Optotune	CAB-6-300	
ETL Lens Driver	Optotune	EL-E-4i	
Filter	Chroma	ET525/30	
Filter	Chroma	ET585-40	
Filter	Chroma	ET645-75	
Filter wheel	Shutter Instrument	LAMBDA 10-B	
Motorized translation stage	Physik Instrumente	L-406.20DG10	
Motorized translation stage	Physik Instrumente	L-406.40DG10	
Motorized translation stage	Physik Instrumente	M-403.4PD	
NI multifunction I/O	National Instrument	PCIe-6363	
sCMOS camera	Hamamatsu	C13440-20CU	
Stepper motor	Pololu	1474	
Tube lens	Olympus	MVX-TLU	