

Materials List for:

Switchable Acoustic and Optical Resolution Photoacoustic Microscopy for *In Vivo* Small-animal Blood Vasculature Imaging

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URL: <https://www.jove.com/video/55810>

DOI: [doi:10.3791/55810](https://doi.org/10.3791/55810)

Materials

Name	Company	Catalog Number	Comments
Q-switched Nd:YAG laser	Edgewave	BX80-2-L	Pump laser
Credo-High Repetition Rate Dye Laser	Spectra physics	CREDO-DYE-N	Dye laser
Precision Linear Stage	Physik Instrumente	PLS 85	XY raster scanning stage
Translation stage	Physik Instrumente	VT 80	Confocal determine
Mounted Silicon photodiode	Thorlabs	SM05PD1A	Triggering/Pulse variation
Motorized continuous Rotational stage	Thorlabs	CR1/M-Z7	Diverting laser beam
Mounted Continuously Variable ND Filter	Thorlabs	NDC-50C-4M	Intensity variable
Fiber Patch Cable	Thorlabs	M29L01	Multimode fiber
Microscope objective	Newport	M-10X	Objective
XY translating mount	Thorlabs	CXY1	Translating mount
Plano convex lens	Thorlabs	LA1951	Collimating lens
Conical lens	Altechna	APX-2-B254	Ring shape beam
Translation stage	Thorlabs	CT1	Translating stage
Optical condenser	Home made		
Ultrasonic transducer	Olympus-NDT	V214-BB-RM	50MHz transducer
Plano concave lens	Thorlabs	LC4573	Acoustic lens
Pulser/Receiver	Olympus-NDT	5073PR	Pulse echo amplifier
Mounted standard iris	Thorlabs	ID12/M	Beam shaping
Plano convex lens	Thorlabs	LA4327	Condenser lens
Mounted precision pinhole	Thorlabs	P50S	Spatial filtering
Single mode fiber patch cable	Thorlabs	P1-460B-FC-1	Single mode fiber
Fiber coupler	Newport	F-91-C1	Single mode coupling
Achromatic doublet lens	Edmund Optics	32-317	Achromatic doublet
Protected silver elliptical mirror	Thorlabs	PFE10-P01	Mirror
Right angle kinematic mirror mount	Thorlabs	KCB1	Mirror mount
Z-Axis Translation Mount	Thorlabs	SM1Z	z translator
Lens tube	Thorlabs	SM05L10	
UV Fused Silica Right-Angle Prism	Thorlabs	PS615	Right angle prism
Rhomboid prism	Edmund Optics	47-214	Shear wave
Dimethylpolysiloxane	Sigma Aldrich	DMPS1M	Silicon oil
Amplifier	Mini Circuits	ZFL-500LN	Amplifier
16 bit high speed digitizer	Spectrum	M4i.4420	Data acquisition card

Oscilloscope	Agilent Technologies	DS06014A	
Mice	InVivos Pte.Ltd	ICR	Animal model
Ultrasound gel	Progress/parker acquasonic gel	PA-GEL-CLEA-5000	Acoustic coupling
Water tank	Home made		
Translation stage	Homemade		Switching AR-OR
Gold nanoparticles	Sigma Aldrich	742031	Lateral resolution
Sterile ocular ointment	Alcon	Duratears	Animal imaging
1951 USAF resolution test target	Edmund Optics	38257	Confocal alignment
Data acquisition software	National Instrument	Labview	Home made software using Labview
Image Processing software	Mathworks	Matlab	Home made program using Matlab