

Longitudinal Intravital Imaging Through Clear Silicone Windows

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Materials

Name	Company	Catalog Number	Comments
3M Medipore Soft Cloth Surgical Tape	3M	70200770819	
Silk suture 4-0 PERMA HAND BLACK 1 x 18" RB-2	Ethicon	N267H	
ACTB-ECFP mice	Jackson Laboratory	22974	
AEC Substrate Kit, Peroxidase (HRP), (3-amino-9-ethylcarbazole)	Vector Laboratories	SK-4200	
Alcohol swabs	BD	326895	
Anesthesia system	Molecular Imaging Products Co.		
Acqknowledge software and sensors	BIOPAC	ACK100W, ACK100M, TSD110	
Betadine spray	LORIS	109-08	
c-fms-EGFP (MacGreen) mice	Jackson Laboratory	18549	
C57BL/6J mice	Jackson Laboratory	664	
CD45 Monoclonal Antibody (30-F11)	Invitrogen	14-0451-82	
CD68 Antibody	Abcam	ab125212	
Curity gauze sponges	Covidien		
Donkey Anti-Goat IgG H&L (HRP)	Abcam	ab6885	
Donkey Anti-Rabbit IgG H&L (HRP)	Abcam	ab97064	
Donkey Anti-Rat IgG H&L (HRP)	Abcam	ab102182	
Dow SYLGARD 184 Silicone Encapsulant Clear	Electron Microscopy Sciences	24236-10	Two-part, 10:1 mixing ratio
Round Cover Glass, 8mm Diameter, #1.5 Thickness	Electron Microscopy Sciences	72296-08	
Ender-3 Pro 3D printer	Shenzhen Creality 3D Technology Co., LTD		

Far Infrared Heated blanket	Kent Scientific	RT-0520	
Fc Receptor Blocker	Innovex Biosciences	NB309	
Fiji imaging processing package			https://imagej.net/software/fiji/
FluoroSpheres carboxylate, 0.04µm, yellow-green (505/515)	Invitrogen	F8795	
Gating system:	BIOPAC Systems Inc.		The components together allow monitoring mouse vitals during imaging and gating image acquisition on mouse respiration. All were acquired from BIOPAC systems.
Acqknowledge software		ACK100W, ACK100M	
Diff. Amp. Module, C Series		DA100C	
Dual Gating Sys small animal		DTU200	
MP160 for Windows - Analysis system		MP160WSW	
MouseOx Plus 120V		MOX-120V;015000	
Pressure Pad		TSD110	
Gelfoam	Pfizer	9031508	Absorbable gelatin sponge
Hardened fine scissors	Fine Science Tools	14090-11	Two pairs; stainless steel, sharp-sharp tips, straight tip, 26 mm cutting edge, 11 cm length
Human/Mouse Myeloperoxidase/ MPO Antibody	R&D Systems	AF3667	
Hot bead sterilizer	Fine Science Tools	18000-45	Turn on approximately 30 min before use; sterilize tools at >200 °C for 30 s
Imaris	Bitplane	www.bitplane.com	
Immersion medium Immersol W 2010	Zeiss	444969-0000-000	
Insulin Syringes with BD Ultra-Fine needle 6mm x 31G 1 mL/cc	BD	324912	
Isoflurane (Fluriso)	VetOne	502017	
Lycopersicon Esculentum (Tomato) Lectin (LEL, TL), DyLight® 594	Vector Laboratories	DL-1177-1	
LysM-eGFP mice	www.mmrrc.org	012039-MU	
Micro dissecting forceps	Roboz	RS-5135	Serrated, slight curve, 0.8 mm tip width; 4" length
Micro dissecting forceps	Roboz	RS-5153	1 x 2 teeth, slight curve, 0.8 mm tip width, 4" length
MTS MiniBionix II 808	MTS Systems		Servo-hydraulic material testing machine
Neutrophil Elastase 680 FAST probe	PerkinElmer	NEV11169	
Nitrogen	General Welding Supply Corp.		
Oxygen	General Welding Supply Corp.		
Polylactic acid filament	Hatchbox		1.75 mm diameter
ProLong Diamond Antifade Mountant	Invitrogen	P36970	
Puralube ophthalmic ointment	Dechra	NDC17033-211-38	
Reflex 7 wound clips	Roboz Surgical	RS-9255	
Stainless steel grid	Fotofab		One grid is 0.200 inches in diameter, with a total of 52 individual grid squares that are 0.016 x 0.016 inches. There is 0.003 inches of space between each square.
Surface Treated Sterile Tissue Culture Plates	Fisher Scientific	FB012929	Lid used as curing surface for imaging windows

TriM Scope Multiphoton Microscope	LaVision BioTec		Imaging was done on an upright 2-photon microscope (Trimscope, LaVision BioTec) equipped with two Ti:Sapphire lasers (Mai Tai and InSight, Spectra-Physics) and an optical parametric oscillator. The following Longpass Dichroic Beamsplitters (Chroma) were used to direct the signal towards four photomultiplier tubes: T560LP T665LPXXR T495lxpr
Vetbond	3M	70200742529	
VWR micro cover glass	VWR	48404-453	