

Materials List for:

# Middle Cerebral Artery Occlusion Allowing Reperfusion via Common Carotid Artery Repair in Mice

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URL: <https://www.jove.com/video/58191>

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## Materials

Name	Company	Catalog Number	Comments
0.7 mm flexible single fibre optic probe	Moor Instruments, UK	P10d	Use with master probe code: VP10M200ST
7-0 silicone coated monofilament	Doccol, USA	701956PKRe	Item dependent on animal size and weight - use manufacturer guidelines. Product code here was used for representative results shown in article.
9.4T Preclinical MRI system	Agilent Technologies, Santa Clara, California, USA	MY11520101	Equipped with gradient and RF coils suitable for mouse brain imaging
Animal monitoring and gating equipment	SA Instruments, Stony Brook, New York, USA	22124005	MRI compatible temperature and respiration monitoring
Bupivacaine	National Veterinary Services, Stoke-on-trent, UK	512345	Marcaine
C57BL/6 Mice	Charles River, Oxford, UK	B6JSIMA49D	
Carprofen	Norbrook Laboratories	143658	Carprieve 5% w/v Small animal solution for injection
Chlorhexidine 4% hand cleanser solution	VWR International Ltd, Lutterworth, UK	MOLN10008780	HibiScrub Antimicrobial hand cleanser, Molnlycke Health Care
Cotton buds	National Veterinary Services, Stoke-on-trent, UK	213512	Any plastic body, cotton bud tip are suitable once made sterile by autoclaving.
Dissecting stereoscope	Carl Zeiss	OPMI99	Resident piece of equipment. Any binocular dissecting stereoscope capable of x1-x5 magnification will be suitable.
dissolvable 6-0 sutures	National Veterinary Services, Stoke-on-trent, UK	9544	Absorbable Sutures Ethicon Coated Vicryl 6/0 (Ethicon code: W9981)
Donut probe holder	Moor Instruments, UK	PHDO	Probe holder for mouse, required to be used with single fibre optic probe when used with laser doppler flowmetry machine.
dumont #5 forceps	World Precision Instruments, Hertfordshire, UK	500342	
Fibrinogen and thrombin sealant	Baxter, Berkshire, UK	1502243	TISSEEL Ready to use solutions for Sealant 2 mL
Gel food	Datesand group, Manchester, UK	72065022	Diet Gel Recovery
Image display and measuring software package	3D Slicer	<a href="https://www.slicer.org/">https://www.slicer.org/</a>	Version 4.0

Image display and measuring software package	NIH, Maryland, USA	<a href="https://imagej.nih.gov/ij/index.html">https://imagej.nih.gov/ij/index.html</a>	NIH/ImageJ
LDF monitor	Moor Instruments, UK	moorVMS-LDF	
micro vannas scissors	InterFocus Ltd, Linton, UK	15000-08	Other microvannas spring scissors can be used as an alternative, although fine tips are required.
Microvascular clip	World Precision Instruments, Hertfordshire, UK	15911	10 G Vessel Clip
microvascular clip holders	World Precision Instruments, Hertfordshire, UK	14189	
MRI acquisition and analysis software	Agilent Technologies, Santa Clara, California, USA	VnmrJ Version 4.2	Revision A
no. 15 scalpel	Scientific Laboratory Supplies, Nottingham, UK	INS4678	Sterile No15 Scalpel - manufacturer number P305. Other suppliers are available.
Non-dissolvable 6-0 suture	National Veterinary Services, Stoke-on-trent, UK	W529	Ethicon Mersilk Sutures
Ocular lubricant	National Veterinary Services, Stoke-on-trent, UK	847288	Lacrilube (5100G13)
Optical matching gel	Moor Instruments, UK	PMG	
Pulse Oximetry Reader	Starr Life Sciences Corp., Oakmont, PA, USA	MouseOx	MouseOx - rat & mouse pulse oximeter & physiological monitor Use with mouse thigh sensor.
Rehydration gel	Datesand group, Manchester, UK	70015022	HydroGel
Small hair clippers	vetproductsuk.com	HS61	Contura Cordless trimmer/clippers
Sterile 0.9 % NaCl Solution	VWR International Ltd, Lutterworth, UK	LOCA3528286	SODIUM CHLORIDE 0.9% W/V INTRAVENOUS INFUSION BP 500 ML IN ECOFLAC <sup>1</sup> / <sub>2</sub> PLUS
sterile Petri dish	VWR International Ltd, Lutterworth, UK	5168021	50 mm sterile Petri dish. Any brand is suitable. Minimum 50 mm diameter is required.
Topical tissue adhesive	World Precision Instruments, Hertfordshire, UK	503763	GLUture topical Tissue Adhesive
Waterproof superglue	Loctite	Loctite Superglue Precision Max	Available at most hardware shops.
White paper chip	Datesand group, Manchester, UK	CS1BPB	Pure-O'Cel