

Materials List for

In Vivo Fiber-Coupled Pre-Clinical Confocal Laser-scanning Endomicroscopy (pCLE) of Hippocampal Capillaries in Awake Mice

Rocio Leal-Campanario^{1,2}, Susana Martinez-Conde^{2,3}, Stephen L. Macknik^{2,3}

¹División de Neurociencias, Universidad Pablo de Olavide ²Barrow Neurological Institute ³Ophthalmology, Neurology, and Physiology/Pharmacology, SUNY Downstate Medical Center

Corresponding Author

Stephen L. Macknik
macknik@neuralcorrelate.com

Citation

Leal-Campanario, R., Martinez-Conde, S., Macknik, S.L. In Vivo Fiber-Coupled Pre-Clinical Confocal Laser-scanning Endomicroscopy (pCLE) of Hippocampal Capillaries in Awake Mice. *J. Vis. Exp.* (194), e57220, doi:10.3791/57220 (2023).

Date Published

April 21, 2023

DOI

10.3791/57220

URL

jove.com/video/57220

Materials

Name	Company	Catalog Number	Comments
0.7 mm diameter burr	Fine Science Tools	19007-07	For Screws No. 19010-00
0.9 mm diameter burr	Fine Science Tools	19007-09	
ASEPTICO AEU-12C TORQUE PLUS	from Handpiece solution	AEU12C	
Bull dog serrifine clump	Fine Science Tools	18050-28	
CellVizio dual band	Mauna Kea Technologies		
CellVizio single band	Mauna Kea Technologies		
Confocal Microprobe 300 microns (Serie S)	Mauna Kea Technologies		
Custom-made alignment piece	L-shaped (angled at 90 deg) and made of stainless steel with two holes drilled on it, with a 4 mm separation from center to center		
Custom-made mounting bar	The long section piece of the mounting bar should be between 9.4 - 13mm. Fixed to this piece of the mounting bar, position a stainless-steel plate 1.5 cm long and 0.5 cm wide that has two holes drilled separated 4 mm from center to center, the same distance that the L-shaped alignment piece.		
Cyanoacrylate adhesive-Super Glue			
Dumont forceps #5	Fine Science Tools	11252-20	
DuraLay Inlay Resin – Standard Package	Reliance Dental Mfg Co.	602-7395 (from patterson dental)	
Fillister Head, Slotted Drive, M1.6x0.35 Metric Coarse, 12mm Length Under Head, Machine Screw	MSC industrial direct co.	2834117	
Fine Point scissor	Fine Science Tools	14090-09	

Fluorescein 5% w/w lysine-fixable dextran (2MD)	Invitrogen, USA	D7137	
Halsey smooth needle holder	Fine Science Tools	12001-13	
Kalt suture needle 3/8 curved	Fine Science Tools	12050-03	
lab standard stereotaxic, rat and mouse	Stoelting Co. 51704	51670	
Methocel 2%	Omnivision GmbH	PZN: 04682367	Eye ointment to prevent dryness.
Mouse Temperature controller, probe (YSI-451), small heating pad-TC-1000 Mouse	CWE Inc.	08-13000	
PhysioTel F20-EET transmitters	DSI	270-0124-001	
Robot Stereotaxic, Manipulator Arm, ADD-ON, 3 Axis, LEFT	Stoelting Co.C13	51704	
Sel-Tapping bone screws	Fine Science Tools	19010-10	
Standard Ear Bars and Rubber Tips for Mouse Stereotaxic	Stoelting Co	51648	
Suture Thread - Braided Silk/Size 4/0	Fine Science Tools	18020-40	
Tissue separating microspatula	Fine Science Tools	10091-121	