

Materials List for

Simultaneous Imaging of Microglial Dynamics and Neuronal Activity in Awake Mice

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Citation

Maruoka, H., Kamei, R., Mizutani, S., Liu, Q., Okabe, S. Simultaneous Imaging of Microglial Dynamics and Neuronal Activity in Awake Mice. *J. Vis. Exp.* (186), e64111, doi:10.3791/64111 (2022).

Date Published

August 23, 2022

DOI

10.3791/64111

URL

jove.com/video/64111

Materials

Name	Company	Catalog Number	Comments
10-inch LCD monitor	EIZO	DuraVision FDX1003	For presenting grating visual stimuli
26G Hamilton syringe	Hamilton	701N	
27G needle	Terumo	NN-2719S	
AAV-hSyn-R-CAMP1.07	N/A	N/A	Kindly gifted from Prof. Matsuzaki's laboratory
Activated charcoal powder	Nacalai tesque	07909-65	
Black aluminum foil	THORLABS	BKF12	
CX3CR1-EGFP mouse	Jackson laboratory	IMSR_JAX: 005582	CX3CR1-EGFP/+ knock-in/knock-out mice expressing EGFP in microglia in the brain under the control of the endogenous <i>Cx3cr1</i> locus.
DENT SILICONE-V	Shofu Inc	N/A	For the attachment of a shading device to a head-plate
Dental cement (quick resin, liquid)	Shofu Inc	N/A	AB
Dental cement(quick resin, powder)	Shofu Inc	N/A	B Color 3
Drill	Toyo Associates	HP-200	
Glass capillary pipette	Drummond Scientific Company	2-000-075	
Glass disc (large)	Matsunami	N/A	4mm in diameter, 0.15±0.02mm in thickness
Glass disc (small)	Matsunami	N/A	2mm in diameter, 0.525±0.075mm in thickness
Head-plate	Customized	N/A	Material: SUS304, thickness: 0.5mm, see Figure2B for the shape
Hemostatic fiber	Davol Inc	1010090	
ImageJ Fiji software		Free software	For data registration
Instant glue (Aron alpha)	Daiichi Sankyo	N/A	
Isoflurane	Pfizer	N/A	
Lidocaine	Astrazeneca	N/A	
MATLAB 2017b	MathWorks	N/A	For data registration and processing
Meloxicam	Tokyo Chemical Industry	M1959	

Microinjector	KD Scientific	KDS-100	
Micropipette puller	Sutter Instrument Company	P-97	
Multi-photon excitation microscope	NIKON	N/A	The commercial name is "A1MP+".
Objective lens	NIKON	N/A	The commercial name is "CFI75 apochromat 25xC W".
Paraffin Liquid	Nacalai tesque	26132-35	
Psychtoolbox		Free software	For presenting grating visual stimuli
Shading device	Customized	N/A	
Stereomicroscope	Leica	M165 FC	
Stereotaxic instrument	Narishige Scientific Instrument	SR-611	For the surgery
Stereotaxic instrument	Customized	N/A	For fixing mice under the two-photon microscope
Stopcock	ISIS	VXB1079	
Surgical silk	Ethicon	K881H	
Treadmill	Customized	N/A	
UV light curing agent	Norland Products Inc	NOA 65	
Vaporizer	Penlon	Sigma Delta	Anesthetic machine