

Materials List for:

3D Scanning Technology Bridging Microcircuits and Macroscale Brain Images in 3D Novel Embedding Overlapping Protocol

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Materials

Name	Company	Catalog Number	Comments
Air compressor	Kimura Medical	KA-100	Animal preparation for MRI
All-in-one fluorescence microscope	KEYENCE	BZ-X710	
Anesthesia box	Bio Research Center	RIC-01	Animal preparation for MRI
Anesthesia system	ACOMA Medical Industry	NS-5000A	Animal preparation for MRI
Anti-GAD67, clone 1G10.2	Merk Millipore	MAB5406	For immunostaining
Calcium Chloride	nacalai tesque	06729-55	aCSF
Choline Chloride	nacalai tesque	08809-45	aCSF
Curved blunt forceps			
Disposal scalpel	Kai	10	
D-PBS(-) without Ca and Mg, liquid (10x)	nacalai tesque		For immunostaining
D(+)-Glucose	Wako	049-31165	aCSF
Gelatin	nacalai tesque	16605-42	re-sectioning
Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488	Invitrogen	A32723	For immunostaining
Goat anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 555	Invitrogen	A32732	For immunostaining
Heater mat	Bio Research Center	HM-10	Animal preparation for MRI
Heater mat controller	Bio Research Center	BWT-100A	Animal preparation for MRI
Heater system	SA Instruments	MR-compatible Small Animal Heating System	Animal preparation for MRI
Isoflurane	AbbVie		Animal preparation for MRI
Isoflurane vaporizer	ACOMA Medical Industry	MKIIIai	Animal preparation for MRI
Linear Slicer	DOSAKA	Neo Linear Slicer MT	
L(+)-Ascorbic Acid Sodium Salt	Wako	196-01252	aCSF
Magnesium Chloride Hexahydrate	Wako	135-00165	aCSF
MaxOne Single-Well MEA	MaxWell Biosystems		
Metal Spatula			
Monitoring system	SA Instruments	Model 1025	Animal preparation for MRI
Monitoring software	SA Instruments	PC-SAM V.5.12	Animal preparation for MRI
MRI compatible cradle	Bruker BioSpin	T12812	Animal preparation for MRI
MRI coil	Bruker BioSpin	T9988	For MRI
MRI operation software	Bruker BioSpin	ParaVision 5.1	For MRI

Neo LinearSlicer MT	D.S.K.	NLS-MT	
NeuN (D4G40) XP Rabbit mAb	Cell Signaling	24307	For immunostaining
Normal Goat Serum	Wako	143-06561	For immunostaining
Potassium Chloride	Wako	163-03545	aCSF
Polyethylene Glycol Mono-p- isooctylphenyl Ether	nacalai tesque	12967-45	For immunostaining
Pressure-sensitive respiration sensor	SA Instruments	RS-301	Animal preparation for MRI
Preclinical MRI scanner	Bruker BioSpin	BioSpec 70/20 USR	For MRI
Pyruvic Acid Sodium Salt	nacalai tesque	29806-54	aCSF
SCAN in a BOX	Open Technologies srl		
Scissors			
Sieve bottle	TIGERCROWN	81	For 3D scan
SlowFade Gold Antifade Mountant	Invitrogen	S36937	For immunostaining
Sodium Chloride	Wako	191-01665	aCSF
Sodium Dihydrogenphosphate	Wako	197-09705	aCSF
Sodium Hydrogen Carbonate	Wako	191-01305	aCSF
Sodium Hydrogensulfite	nacalai tesque	31220-15	For immunostaining
Thermistor temperature probe	SA Instruments	RTP-101-B, PLTPC-300	Animal preparation for MRI
Tooth bar	Bruker BioSpin	T10146	Animal preparation for MRI
Winged intravenous needle	TERUMO	SV-23CLK	For perfusion
1 mol/l-Tris-HCl Buffer Solution	nacalai tesque	35436-01	For immunostaining
1 mol/l-Hydrochloric Acid	nacalai tesque	37314-15	For pH adjustment of solution
16%-Paraformaldehyde Aqueous Solution	Electron Microscopy Sciences	15710	For immunostaining