

Materials List for:

Modification of a Colliculo-thalamocortical Mouse Brain Slice, Incorporating 3-D printing of Chamber Components and Multi-scale Optical Imaging

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Materials

Name	Company	Catalog Number	Comments
High sucrose cutting solution			in mM: 206 sucrose, 10.0 MgCl ₂ , 11.0 glucose, 1.25 NaH ₂ PO ₄ , 26 NaHCO ₃ , 0.5 CaCl ₂ , 2.5 KCl, pH 7.4
Low calcium aCSF			in mM: 126 NaCl, 3.0 MgCl ₂ , 10.0 glucose, 1.25 NaH ₂ PO ₄ , 26 NaHCO ₃ , 1.0 CaCl ₂ , 2.5 KCl, pH 7.4
aCSF			in mM: 126 NaCl, 2.0 MgCl ₂ , 10.0 glucose, 1.25 NaH ₂ PO ₄ , 26 NaHCO ₃ , 2.0 CaCl ₂ , 2.5 KCl, pH 7.4
Stimulus Isolator	World Precision Instruments	A360	
DMSO	Life Technologies	D12345	Lot: 1572C502
Fura-2AM	Life Technologies	F1201	Lot: 144912
Pluronic F-127	Life Technologies	P3000MP	Lot: 1499369
Large culture dish	Fisherbrand	08-757-13	100 x 15 mm culture dish
Small culture dish	Falcon	353001	35 x10 mm culture dish
Raised culture membrane	Millicell	PICMORG50	Used to maintain oxygenated fluid perfusion on both sides of slice.
Flavoprotein imaging fluorescence cube	Olympus	UMNIB	470–490 nm excitation, 505 nm dichroic, 515 nm emission long pass. We have found that virtually any green fluorescence protein filter cube will work here.
Calcium imaging fluorescence cube	Omega Optical	BX-18	XF1005 365 nm excitation, XF2001 400 nm dichroic, XF3080 510 nm emission
Agar for blocking brain			3% by weight in water
Viper si Stereo Lithography Apparatus	3D Systems		