

Materials List for:

Analyzing the Size, Shape, and Directionality of Networks of Coupled Astrocytes

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Materials

Name	Company	Catalog Number	Comments
NaCl	Fisher Chemicals	S671-3	
KCl	Fisher Chemicals	P217-500	
KH ₂ PO ₄	Fisher Chemicals	P285-500	
MgSO ₄	Fisher Chemicals	M65-500	
NaHCO ₃	Fisher Chemicals	S233-500	
C ₆ H ₁₂ O ₆ Dextrose anhydrous	Fisher Chemicals	D16-500	
CaCl ₂ dihydrated	Sigma	C70-500	
Sucrose	Sigma	S9378	
D-gluconic acid potassium salt	Sigma	G45001	
MgCl ₂ anhydrous	Sigma	M8266	
HEPES	Sigma	H3375	
EGTA	Sigma	E4378	
ATP _{Tris Salt}	Sigma	A9062	
GTP _{Tris Salt}	Sigma	G9002	
Biocytin	Sigma	B4261	
Carbenoxolone disodium salt	Sigma	C4790	
avidin-biotin complex : ABC kit	Vestor laboratories	PK-4000	
Streptavidine-alexa 594	Molecular Probes	S11227	
Triton	Fisher Chemicals	BP151-500	
Xylene	Fisher Chemicals	X5-1	
Aqueous mounting medium 1 : Fluoromount-G	SouthernBiotech	0100-01	
Toluene-based synthetic resin mounting medium : Permount	Fisher Chemicals	SP15-100	
Slide Drying Bench	Fisherbrand	11-474-470	
Vibratome	Leica	VT 1000S	
Microscope cover glass	Fisherbrand	12-544A	
Microscope slide ColorFrost	Fisherbrand	12-550-413	
PFA	Fisherchemicals	04042-500	
Olympus FluoView FV 1000 Confocal microscope	Olympus		
40X water-immersion lens	Olympus	LUMPLFLN40XW	
20X water-immersion lens	Olympus	XLUMPLFL20XW	
4X water-immersion lens	Olympus	XLFLUOR4X/340	

Micropipette puller	Sutter Instrument	P97	
Micromanipulator	Sutter Instrument	MP 225	
Camera CCD	Sony	CX-ST50	
Black and white monitor	Sony	SSM-125	
Digidata	Molecular devices	1322A	
Patch Clamp amplifier	Axon instrument	Multiclamp 700A	
Electrophysiology acquisition software	Molecular devices	pClamp 8	
Electrophysiology analysis software	Molecular devices	Clampfit 8	
Imaging analysis software	ImageJ/FIJI	Open source software. FIJI version including plug in package.	
Vector image editor	Adobe	Illustrator CS4	
Spreadsheet application	Microsoft Office	Excel 2010	