

Materials List for:

Simultaneous Electrophysiological Recording and Calcium Imaging of Suprachiasmatic Nucleus Neurons

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Materials

Name	Company	Catalog Number	Comments
NaCl	Fisher Scientific Co.	S271-3	
KCl	Fisher Scientific Co.	P217-500	
NaH ₂ PO ₄ •H ₂ O	Sigma Chemical Co.	S-9638	
MgCl ₂ •6H ₂ O	Fisher Scientific Co.	M33-500	
CaCl ₂ •2H ₂ O	Fisher Scientific Co.	C79-500	
D-glucose	Fisher Scientific Co.	D16-500	
NaHCO ₃	Fisher Scientific Co.	S233-500	
Sucrose	Fisher Scientific Co.	S5-500	
Potassium D-gluconate	Sigma-Aldrich	G4500	
HEPES	Sigma-Aldrich	H4034	
Adenosine 5'-triphosphate dipotassium salt dihydrate	Sigma-Aldrich	A8937	
Guanosine 5'-triphosphate tris salt	Sigma-Aldrich	G9002	
Agarose (ultrapure)	Life Technologies	15510-027	Gel pored into sterile Petri dish 6 mm thick layer
KOH	Sigma-Aldrich	P-6310	
NaOH	Sigma-Aldrich	S-5881	
Bis-fura-2, hexapotassium salt	Invitrogen	B6810	Cell impermeant
Name of Equipment	Company	Catalog Number	Comments
Microtome	Leica	VT1000S	Tissue slicing
Cyanoacrylic glue (Roti-Coll1)	Carl Roth GmbH+Co	Art-Nr. 0258.1	
Microelectrode puller	Narshige International USA	PP-83	
Microelectrode Capillary Tubes	World Precision Instruments	1B150F-4	
Microfil 34 g	World Precision Instruments	MF34G-5	
Syringe filter	Corning	#431212	
Microscope	Leica	DM LFS	With 4X, 40X UV and 63X UV objectives, and epifluorescence
CCD Camera	Hamamatsu	ORCA ER	12 bit CCD
Fura-2 Filter Cube	Chroma	71500A	Set with UG11 filter
Polychrome IV	Till Photonics GmbH		Monochromometer
Ultraviolet blocking safety glasses	Ultra-Violet Products		
EPC-9 amplifier	HEKA Eletronik		
Metafluor	Molecular Devices		Imaging Software
Patchmaster	HEKA Eletronik		Data Acquisition Software

Igor version 6	Wavemetrics		Electrophysiology & Ca ²⁺ Data Analysis
VAPRO 5520	Westcor		Vapor pressure osmometer