

Materials List for:

Real-time Electrophysiology: Using Closed-loop Protocols to Probe Neuronal Dynamics and Beyond

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Materials

Name	Company	Catalog Number	Comments
Tissue slicer	Leica	VT-1000S	
Pipette puller	Sutter	P-97	
Pipettes	WPI	1B150F-4	1.5/0.84 mm OD/ID, with filament
Vibration isolation table	TMC	20 Series	
Microscope	Leica	DMLFS	40X Immersion Objective
Manipulators	Scientifica	PatchStar	
Amplifiers	Axon Instruments	MultiClamp 700B	Computer controlled
Data acquisition card	National Instruments	PCI-6229	Supported by Comedi Linux Drivers
Desktop computer	Dell	Optiplex 7010 Tower	OS: real-time Linux
Oscilloscopes	Tektronix	TDS-1002	
Perfusion Pump	Gibson	MINIPULS3	Used with R4 Pump head (F117606)
Temperature controller	Multichannel Systems	TC02	PH01 Perfusion Cannula
Manometer	Testo	510	Optional
Incubator	Memmert	WB14	
NaCl	Sigma	71376	ACSF
KCl	Sigma	P9541	ACSF, ICS
NaH ₂ PO ₄	Sigma	S3139	ACSF
NaHCO ₃	Sigma	S6014	ACSF
CaCl ₂	Sigma	C1016	ACSF
MgCl ₂	Sigma	M8266	ACSF
Glucose	Sigma	G7528	ACSF
K-Gluconate	Sigma	G4500	ICS
HEPES	Sigma	H3375	ICS
Mg-ATP	Sigma	A9187	ICS
Na ₂ -GTP	Sigma	51120	ICS
Na ₂ -Phosphocreatine	Sigma	P7936	ICS