

Materials List for:

Microelectrode Impalement Method to Record Membrane Potential from a Cannulated Middle Cerebral Artery

Joey T. Reed¹, Sumit P. Sontakke¹, Mallikarjuna R. Pabbidi¹

¹Department of Pharmacology and Toxicology, University of Mississippi Medical Center

Correspondence to: Mallikarjuna R. Pabbidi at MPabbidi@umc.edu

URL: <https://www.jove.com/video/59072>

DOI: [doi:10.3791/59072](https://doi.org/10.3791/59072)

Materials

Name	Company	Catalog Number	Comments
Dissection instruments			
Anesthetic Vaporiser	Parkland scientific	V3000PK	
Dissection microscope	Nikon Instruments Inc., NY	Eclipse Ti-S	
Kleine Guillotine Type 7575	Harvard Apparatus, MA	73-198	
Littauer Bone Cutter	Fine science tools	16152-15	
Moria MC40 Ultra Fine Forceps	Fine science tools	11370-40	
Surgical scissors Sharp-Blunt	Fine science tools	14008-14	
Suture	Harvard Apparatus	72-3287	
Vannas Spring Scissors	Fine science tools	15018-10	
Electrophysiology Instruments			
Charge-coupled device camera	Qimaging, BC	Retiga 2000R	
Differential electrometer amplifier	WPI	FD223A	
In-line pressure transducer	Harvard Apparatus, MA	MA1 72-4496	
Micromanipulator	Thor labs	PCS-5400	
Microelectrodes	Warner Instruments LLC, CT	G200-6,	
Micro Fil (Microfiber syringe)	WPI	MF28G67-5	
Microelectrode holder	WPI	MEH1SF	
Myograph	Living Systems Instrumentation, VT	CH-1-SH	
Puller	Sutter Instrument, San Rafael, CA	P-97	
Vibration-free table	TMC	3435-14	
Softwares			
Clampex 10	Molecular devices		
p Clamp 10	Molecular devices		
Imaging software	Nikon, NY	NIS-elements	
Chemicals			
NaCl	Sigma	S7653	
KCl	Sigma	P4504	
MgSO ₄	Sigma	M7506	
CaCl ₂	Sigma	C3881	
HEPES	Sigma	H7006	
Glucose	Sigma	G7021	
NaH ₂ PO ₄	Sigma	S0751	
NaHCO ₃	Sigma	S5761	