

Materials List for:

# Ex Vivo Pressurized Hippocampal Capillary-Parenchymal Arteriole Preparation for Functional Study

Amanda C. Rosehart<sup>1</sup>, Abbie C. Johnson<sup>2</sup>, Fabrice Dabertrand<sup>1,3</sup>

<sup>1</sup>Department of Anesthesiology, University of Colorado Anschutz Medical Campus

<sup>2</sup>Department of Neurological Sciences, University of Vermont Larner College of Medicine

<sup>3</sup>Department of Pharmacology, University of Colorado Anschutz Medical Campus

Correspondence to: Fabrice Dabertrand at [Fabrice.Dabertrand@CUAnschutz.edu](mailto:Fabrice.Dabertrand@CUAnschutz.edu)

URL: <https://www.jove.com/video/60676>

DOI: [doi:10.3791/60676](https://doi.org/10.3791/60676)

## Materials

Name	Company	Catalog Number	Comments
0.22µm Syringe Filters	CELLTREAT Scientific Products	229751	
12-0 Nylon (12cm) Black	Microsurgery Instruments, Inc	S12-0 NYLON	
Automatic Temperature Controller	Warner Instruments	TC-324B	
Borosilicate Glass O.D.: 1.2 mm, I.D.: 0.68 mm	Sutter Instruments	B120-69-10	
Bovine serum albumin	Sigma-Aldrich	A7030	
CaCl <sub>2</sub> dihydrate	Sigma-Aldrich	C3881	
D-(+)-Glucose	Sigma-Aldrich	G5767	
Dissection Scope	Olympus	SZ11	
ECOLINE VC-MS/CA 4-12 — complete Pump with Drive and MS/CA 4-12 pump-head	Ismatec	ISM 1090	
EGTA	Sigma-Aldrich	E4378	
Fine Scissors - Sharp	Fine Science Tools	14063-09	
Inline Water Heater	Warner Instruments	SH-27B	
Integra™ Miltex™ Tissue Forceps	Fisher Scientific	12-460-117	
KCl	Sigma-Aldrich	P9333	
KH <sub>2</sub> PO <sub>4</sub>	Sigma-Aldrich	P5379	
Magnesium sulfate heptahydrate	Sigma-Aldrich	M1880	
MgCl Anhydrous	Sigma-Aldrich	M8266	
Micromanipulator	Narishige	MN-153	
ML 133 hydrochloride	Tocris	4549	
MOPS	Sigma-Aldrich	M1254	
NaCl	Sigma-Aldrich	S9625	
NaH <sub>2</sub> PO <sub>4</sub>	Sigma-Aldrich	S9638	
NaHCO <sub>3</sub>	Sigma-Aldrich	S8875	
NS309	Tocris	3895	
Picospritzer III - Intracellular Microinjection Dispense Systems, 2-channel	Parker Hannifin	052-0500-900	
Pressure Servo Controller with Peristaltic Pump	Living Systems Instrumentation	PS-200	
Sodium pyruvate	Sigma-Aldrich	P3662	
Super Fine Forceps	Fine Science Tools	11252-20	

---

Surgical Scissors - Sharp-Blunt	Fine Science Tools	14001-13	
Vertical Micropipette Puller	Narishige	PP-83	