

Materials List for:

Combined Infusion and Stimulation with Fast-Scan Cyclic Voltammetry (CIS-FSCV) to Assess Ventral Tegmental Area Receptor Regulation of Phasic Dopamine

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Materials

Name	Company	Catalog Number	Comments
Electrode Filling Solution/Supplies			
Micropipette	World Precision Instruments	MF286-5 (28 gauge)	
Potassium Acetate	Sigma	236497-100G	
Potassium Chloride	Sigma	P3911-25G	
Electrode Supplies			
Carbon fiber	Thornel	T650	
Electrode puller	Narishige International	PE-22	Note: horizontal pullers can be used as well
Glass capillary	A-M systems	626000	
Insulated wires for electrodes	Weico Wire and Cable Incorporated	UL 1423	Length; 10 cm; diameter,0.4mm; must get custom made; insulated material should cover 5 cm of the wire
Light Microscope (for viewing and cutting electrode)	Fischer Scientific	M3700	
Pin	Phoenix Enterprises	HWS1646	To be soldered onto the insulated electrode wire and reference electrode; connects to headstage
Putty	Alcolin	23922-1003	Used to place electrode on while cutting the carbon fiber
Scalpal Blade	World Precision Instruments	500239	For cutting carbon fiber to the appropriate length
Silver Wire	Sigma	327026-4G	
FSCV Hardware/Software			
Faraday Cage	U-Line	H-3618 (36" x 24" x 42")	
Potentiostat	Univ. of N. Carolina, Electronics Facility		
Stimulating electrode	PlasticsOne	MS303/2-A/SPC	when ordering, request a 22 mm cut below pedestal
TarHeel HDCV Software	University of North Carolina-Chapel Hill	-	https://chem.unc.edu/critcl-main/critcl-electronics/critcl-electronics-hardware/ for ordering information
UEI breakout box	Univ. of N. Carolina, Electronics Facility		https://chem.unc.edu/critcl-main/critcl-electronics/critcl-electronics-hardware/ for ordering information

UEI power supply	Univ. of N. Carolina, Electronics Facility		https://chem.unc.edu/critcl-main/critcl-electronics/critcl-electronics-hardware/ for ordering information
Stimulator Hardware			
Neurolog stimulus isolator	Digitimer Ltd.	DS4	Neurolog 800A
Infusion/Stimulation Supplies			
Infusion Pump	New Era Syringe Pump	NE-300	
Internal Cannula	PlasticsOne	C3151/SPC INTERNAL 33GA	
Microliter Syringe	Hamilton	80308	
Tubing	PlasticsOne	C313CT/ PKG TUBING 023 X 050 PE50	
Surgical Supplies			
Cannula Holder	Kopf Instruments	1776 P-1	
Cotton Tip Applicators	Vitality Medical	806	
Electrode Holder	Kopf Instruments	1770	
Heating Pad	Kent Scientific	RT-0501	
Povidone Iodine	Vitality Medical	29906-004	
Screws	Stoelting	Bone Anchor Screws/Pkg.of 100	1.59 mm O.D., 3.2 mm long
Silver wire reference with AgCl	InVivo Metric	E255A	
Square Gauze	Vitality Medical	441408	
Stereotax	Kopf Instruments	Model 902 (Dual Arm Bar)	
Histological Supplies			
Formulin	Sigma	1004960700	
Power supply	BK Precision	9110	
Sucrose	Sigma	80497	
Tungsten microelectrode	MicroProbes	WE30030.5A3	
Drugs for infusions			
((2R)-amino-5-phosphonovaleric acid	Sigma Aldrich	A5282	
N-methyl-D-aspartate	Sigma Aldrich	M3262	
Mecamylamine hydrochloride (M9020-5mg)	Sigma Aldrich	M9020	
Scopolamine hydrobromide (S0929-1g)	Sigma Aldrich	S0929	