

Materials List for:

Analysis of Gene Expression Changes in the Rat Hippocampus After Deep Brain Stimulation of the Anterior Thalamic Nucleus

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URL: <https://www.jove.com/video/52457>

DOI: [doi:10.3791/52457](https://doi.org/10.3791/52457)

Materials

Name	Company	Catalog Number	Comments
Deep Brain Stimulation Surgery			
Stereotactic frame	Kopf Instruments	Model 900	
Drill	Dremmel	7700, 7.2 V	
Scalpel	BD	372610	
Ketamine	Patterson Veterinary	07-803-6637	Schedule III Controlled Substance, procurement, use and storage according to institutional rules
Xylazine	Patterson Veterinary	07-808-1947	
Buprenorphine	Patterson Veterinary	07-850-2280	Schedule III Controlled Substance, procurement, use and storage according to institutional rules
Surgical staples	ConMed Corporation	8035	
Sutures (3-0)	Harvard Apparatus	72-3333	
Syringe (1 ml, 29 1/2 G)	BD	329464	Sterile, use for Anesthesia administration intraperitoneally
Syringe (3 ml, 25 G)	BD	309570	Sterile, use for Analgesia administration subcutaneously
Needles	BD	305761	Sterile, use for clearing broken bone pieces from the burr holes
Ethanol	Fisher Scientific	S25309B	Use for general sterilization
Eye Lubricant	Fisher Scientific	19-898-350	
Stimulator	Medtronic	Model 3628	
DBS electrodes	Rhodes Medical Instruments, CA	SNEX100x-100 mm	Electrodes are platinum, concentric and bipolar
Betadine (Povidone-Iodine)	PDI	S23125	Single use swabsticks, use for sterilizing the scalp before making incision
Brain Dissection and Hippocampal tissue isolation			
Acrylic Rodent Brain Matrix	Electron Microscopy Sciences	175-300	www.emsdiasum.com
Razor Blade	V W R	55411-050	
Guillotine Scissors	Clauss	18039	For decapitation, make sure these scissors are maintained in clean and working condition
Scissors	Codman Classic	34-4098	Use for removing the brain from the skull
Forceps	Electron Microscopy Sciences	72957-06	Use for removing the brain from the skull and for handling during dissection

Phosphate Buffered Saline	Boston Bioproducts	BM-220	
RNA Extraction and cDNA Preparation			
Tri Reagent	Sigma	T9424	Always use in a fume hood and wear protective goggles while handling; avoid contact with skin
Syringe (3 ml, 25 G)	BD	309570	Use for tissue homogenization
Chloroform	Fisher Scientific	BP1145-1	Always use in a fume hood and wear protective goggles while handling; avoid contact with skin
Isopropanol	Fisher Scientific	A416-1	
Glycogen	Thermo Scientific	R0561	
Dnase I Kit	Ambion	AM1906	
Superscript First Strand Synthesis Kit	Invitrogen	11904-018	
Tabletop Microcentrifuge	Eppendorf	5415D	
Quantitative PCR			
SYBR Green PCR Kit	Qiagen	204143	
Custom Oligos	Invitrogen	10668051	
PCR Plates (96 wells)	Denville Scientific	C18080-10	
Optical Adhesive Sheets	Thermo Scientific	AB1170	
Nuclease free Water	Thermo Scientific	SH30538-02	
Real Time PCR Machine	Applied Biosystems	7500	