

Materials List for

Recording Forelimb Muscle Activity in Head-Fixed Mice with Chronically Implanted EMG Electrodes

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Materials

Name	Company	Catalog Number	Comments
#11 Scalpel Blades	World Precision Instruments	504170	For EMG electrode fabrication
#3 Scalpel Handle	Fine Science Tools	10003-12	For EMG electrode fabrication
1 mL Sub-Q Syringe (100 pack)	Becton Dickinson	309597	For administering injectable drugs
12-pin connector	Newark	33AC2371	12-pin connector with brass fittings; for EMG electrode fabrication
18 G Needles	Exel International	26419	For EMG electrode fabrication
27 G Needles	Exel International	26426	For EMG electrode fabrication
3 M Transpore Surgical Tape	3M	1527-0	For taping animal's limbs out during surgery
6-0 silk sutures	Henry Schein	101-2636	These sutures work well with delicate skin around the wrists
C&B Metabond Complete Kit	Pearson Dental	P16-0126	Dental cement to affix connector to headplate
C57BL6/J Mice	Jackson Laboratories	#000664	Wild type mice
Carbofib 5-CF Tweezers (2)	Aven tools	18762	Carbon fiber tipped forceps, used to manipulate delicate parts of electrode (stripped or inserted sections)
Carprodyl (Carprofen) 50 mg/mL Injection	Ceva Animal Health, LLC	G43010B	Injectable analgesic for pain management during and after surgery
Castroviejo Micro Needle Holder	Fine science tools	12060-01	For suturing
Castroviejo Needle Holder (large)	Fine science tools	12565-14	For inserting needle into muscle
Delicate Bone Scraper	Fine science tools	10075-16	To separate skin from underlying tissue
Dietgel 76A Dietary Supplement	Clear H2O	72-07-5022	For post-operative care
Dumont #5/45 Forceps	Fine science tools	11251-35	To remove fascia overlying muscle
Elizabethan collar for mouse	Kent Scientific Corporation	EC201V-10	For post-operative care
Enrofloxacin 2.27%	Covetrus	#074743	Injectable antibiotic for use during and after surgery
Epoxy gel	Devcon	14265	For EMG electrode fabrication

Hopkins Bulldog Clamp (4)	Stoelting	10-000-481	Tissue clamps for headplate implantation
Isoflurane Solution	Covetrus	11695067771	Inhalable anesthesia
Lidocaine Hydrochloride Injectable - 2%	Covetrus	#002468	Topical analgesic for pain management during surgery
Medical Grade Oxygen	Airgas	OX USP200	For administering isoflurane during surgery
MetriCide 1 Gallon	Metrex	10-1400	Glutaraldehyde solution for cold-sterilization of headplate and electrodes
MetriTest Strips 1.5%	Metrex	10-303	Test strips for monitoring glutaraldehyde solution (recommended)
Model 900LS Small Animal Stereotaxic Instrument	Kopf Instruments	900LS	Stereotax with lazy susan feature that allows platform rotation during surgery
PFA-coated 0.0055" braided stainless steel wire	A-M systems	793200	For EMG electrode fabrication
Povidone-iodine prep pads	Dynarex	1108	For cleaning skin
Puralube Vet Ointment	Dechra	37327	Eye ointment for surgery
Sterile alcohol prep pads	Dynarex	1113	For cleaning skin
Straight fine #5 forceps	Fine science tools	11295-10	For curling wire after insertion
Straight fine scissors	Fine science tools	14060-11	For cutting wire
Student Vannas Spring Scissors	Fine science tools	91500-09	For making incisions, trimming fat and fascia, and suturing
Technik Tweezers 7B-SA (2)	Aven tools	18074USA	Curved blunt forceps, for general use during surgery
Triple Antibiotic Ointment	Walgreens	975863	Topical antibiotic for surgery
V-1 Tabletop Laboratory Animal Anesthesia System	VetEquip	901806	Contains all necessary equipment for anesthesia induction and scavenging including vaporizer, induction chamber, moveable plastic nose cone, and tubing