

Using Baseplating and a Miniscope Preanchored with an Objective Lens for Calcium Transient Research in Mice

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Materials

Name	Company	Catalog Number	Comments
0.7-mm drill bit	#19008-07	Fine Science Tools; USA	for surgery
0.1–10 µl pipette tips	104-Q; QSP	Fisher Scientific; Singapore	for testing dental cement
20 G IV catheter	#SR-OX2032CA	Terumo Corporation; Tokyo, Japan	for surgery
27 G needle	AGANI, AN*2713R	Terumo Corporation; Tokyo, Japan	for surgery
AAV9-syn-jGCaMP7s-WPRE	#104487-AAV9; 1.5*10 ¹³	Addgene viral prep; MA, USA	for viral injection
Atropine sulfate		Astart; Hsinchu, Taiwan	for surgery/dummy baseplating/ baseplating
Baseplate	V3	http://miniscope.org	for dummy baseplating/baseplating
BLU TACK	#30840350	Bostik; Chelsea, Massachusetts, USA	Reusable adhesive clay; for surgery/ dummy baseplating/baseplating
Bone Rongeur Friedman	13 cm	Diener; Tuttlingen, Germany	for baseplating
Buprenorphine		INDIVIOR; UK	for surgery
Carprofen	Rimadyl	Zoetis; Exton, PA	analgesia
Ceftazidime		Taiwan Biotech; Taiwan	prevent infection
Data Acquisition PCB for UCLA Miniscope	purchased on https://www.labmaker.org/collections/neuroscience/products/data-aquisition-system-daq		for baseplating
Dental cement set	Tempron	GC Corp; Tokyo, Japan	for testing dental cement
Dental cement set	Tokuso Curefast	Tokuyama Dental Corp.; Tokyo, Japan	for testing dental cement/surgery/ dummy baseplating/baseplating
Dual Lab Standard with Mouse and Rat Adaptors	#51673	Stoelting Co; Illinois, USA	for surgery/dummy baseplating/ baseplating
Duratear ointment		Alcon; Geneva, Switzerland	for surgery/dummy baseplating/ baseplating
Ibuprofen		YungShin; Taiwan	analgesia
Isoflurane		Panion & BF Biotech INC.; Taoyuan, Taiwan	for surgery/dummy baseplating/ baseplating
Inscopix	nVista System	Inscopix; Palo Alto, CA	for comparison with V3 UCLA Miniscope
Ketamine		Pfizer; NY, NY	for euthanasia

Normal saline			for surgery
Micro bulldog clamps	#12.102.04	Dimedo; Tuttlingen, Germany	for lens implantation
Microliter Microsyringes, 2.0 µL, 25 gauge	#88400	Hamilton; Bonaduz, Switzerland	for viral injection
Molding silicone rubber	ZA22 Thixo	Zhermack; Badia Polesine, Italy	for dummy baseplating
Objective Gradient index (GRIN) lens	#64519	Edmund Optics; NJ, USA	for dummy baseplating/baseplating
Parafilm	#PM996	Bemis; Neenah, USA	for dummy baseplating
Portable Suction	#DF-750	Doctor's Friend Medical Instrument Co., Inc., Taichung, Taiwan	for surgery
Relay GRIN lens	#1050-002177	Inscopix; Palo Alto, CA, USA	for dummy baseplating/baseplating
Stainless steel anchor screws	1.00 mm diameter, total length 3.00 mm		for surgery
Stereo microscope	#SL720	Sage Vision; New Taipei City, Taiwan	for surgery/dummy baseplating/ baseplating
Stereotaxic apparatus	#51673	Stoelting; IL, USA	for surgery/dummy baseplating/ baseplating
UV Cure Adhesive	#3321	Loctite; Düsseldorf, Germany	for testing dental cement
V3 UCLA Miniscope	purchased on https://www.labmaker.org/products/miniscope-complete-set-of-components		for surgery/dummy baseplating/ baseplating
Xylazine	X1126	Sigma-Aldrich; St. Louis, MO	for euthanasia
Xylocaine pump spray 10%		AstraZeneca; Södertälje, Sweden	for surgery