

Materials List for:**Establishment of a Severe Dry Eye Model Using Complete Dacryoadenectomy in Rabbits**Robert A. Honkanen¹, Liqun Huang^{2,3}, Wei Huang¹, Basil Rigas^{2,4}¹Department of Ophthalmology, Stony Brook University²Department of Medicine, Stony Brook University³Medicon Pharmaceuticals, Inc⁴Department of Preventive Medicine, Stony Brook UniversityCorrespondence to: Robert A. Honkanen at Robert.Honkanen@stonybrookmedicine.eduURL: <https://www.jove.com/video/60126>

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Materials

Name	Company	Catalog Number	Comments
acepromazine, Aceproinj	Henry Schein Animal Health, Dublin, OH	NDC11695-0079-8	0.1ml/kg subcutaneously injection for rabbit sedation
anesthesia vaporizer	VetEquip, Pleasanton, CA	Item # 911103	Protocol 4.8
animal restraining bag	Henry Schein Animal Health, Dublin, OH	Jorvet J0170	Use appropriately sized bag.
bupivacaine, 0.5%	Hospira Inc, Lake Forest IL	NDC: 0409-1162-02	Mixed 50:50 with 2% lidocaine with 1:100,000 epinephrine for infiltration of incision sites, protocol 5.1
buprenorphine	Henry Schein Animal Health, Dublin, OH		0.01 mg/kg, for postprocedural care, 6.1.4
cautery unit, high-temperature, battery-powered	Medline Industries Inc, Northfield, IL	REF ESCT001	Keep on hand in case of bleeding, protocol 2.7
clipper, Wahl Mini Arco	Henry Schein Animal Health, Dublin, OH	No. 022573	Cordless shears for fur removal, protocol 4.2
Colorado needle	Stryker Craniomaxillofacial, Kalamazoo, MI	N103A	Use with electrosurgical unit to make incisions, protocol 5.1 & 5.3
electrosurgical unit with monopolar cautery plate	Valleylab, Boulder, CO	Force FXc	Use with electrosurgical unit to make incisions, protocol 5.1 & 5.3
fluorescein, Ak-Fluor 10%	AKRON, Lake Forest, IL	NDC17478-253	Dilute to 0.2% with PBS to measure TBUT, measurement of dry eye parameters, protocol 3.1
forceps, curved dressing	Bausch and Lomb (Storz), Bridgewater, NJ	Storz E1406	delicate serrated dressing forceps
forceps, 0.3	Bausch and Lomb (Storz), Bridgewater, NJ	ET6319	For removal of nictating membrane, protocol 2.5
forceps, Bishop Harmon	Bausch and Lomb (Storz), Bridgewater, NJ	E1500-C	Use toothed forceps for dacryoadenectomy, protocol 5.1 & 5.2
hair remover lotion, Nair	Widely available	Softening Baby oil	Dipillary cream for sensitive skin, protocol 4.2
isoflurane	Henry Schein Animal Health, Dublin, OH	29405	Possible alternative sedation, protocol 4.7
IV catheter, Terumo Surflo ETFE 24-gauge	Terumo, Tokyo, Japan; available from Fisher Sci., VWR, McKesson, etc.	SR-OX2419CA	25-gauge for smaller rabbits; protocol 4.6
ketamine	Henry Schein Animal Health, Dublin, OH	NDC 11695-0701-1; NADA 200-055	15 mg/kg, protocol 4.7

ketoprofen	Hospira, Inc., Lake Forest, IL		3 mg/kg, for postprocedural care, 6.1.4
laryngeal mask airway	DocsInnovoent Ltd, London, UK	Vgel R3	Protocol 4.8
lid speculum, wire	Bausch and Lomb (Storz), Bridgewater, NJ	Barraquer SUH01	For removal of nictating membrane, protocol 2.4
lidocaine 2% with epinephrine 1:100,000; 50:50 mixture	Hospira Inc, Lake Forest IL	NDC 0409-3182-02	Pre-treat before removal of nictating membranes, protocol 2.4
lidocaine, preservative-free	Sigma-Aldrich, St. Louis, MO	L5647	1% in PBS for anesthesia agent, for application to eye, protocol 2.4
micropipette	Eppendorf	Research Plus 100 uL	For application of preservative-free lidocaine to eye, protocol 2.4
micropipette tips	World Wide Medical Products	41071052	For application of preservative-free lidocaine to eye, protocol 2.4
monitoring device, multi-parameter	SurgiVet, Waukesha, WI	V9201	For monitoring of vitals, protocol 4.9
needle, 26-gauge	BD, Franklin Lakes, NJ	REF 305115	For injection of lidocaine/epinephrine, protocol 2.3 & 2.5
needle, 30-gauge	BD, Franklin Lakes, NJ	REF 305106	For infiltration of incision sites; syringe and needle size are not critical, protocol 5.1
osmolarity tips	TearLab Corp., San Diego, CA	#100003 REV R	Measure tear osmolarity measurement of dry eye parameters, protocol 3.1
osmometer, TearLab	TearLab Corp., San Diego, CA	Model#20000W REV A	Measure tear osmolarity, measurement of dry eye parameters, protocol 3.1
povidone-iodine solution	Medline Industries Inc, Northfield, IL	PVP Prep Solution, NDC: 53329-939-04, REF MDS 093944	To maintain sterile field, protocol 4.11
rabbit, New Zealand White	Charles River Labs, Waltham, MA (NZW)	2-3 kg	Research animals
Rose bengal stain	Amcon Laboratories Inc., St. Louis, MO	NDC51801-004-40	1% in PBS, for staining the ocular surface, measurement of dry eye parameters, protocol 3.1
saline, normal	B. Braun Medical, Irvine, CA	REF R5200-01	For postprocedural care, protocol 6.1.3
Schirmer Tear Test strips	Eaglevision, Katena products. Denville, NJ	AX13613	Measure tear production, measurement of dry eye parameters, protocol 3.1
scissors, Vannas	McKesson Medical-Surgical, San Francisco, CA	Miltex 2-130	Capsulotomy scissors for dacryoadenectomy, protocol 5.1 & 5.2
scissors, Westcott tenotomy	McKesson Medical-Surgical, San Francisco, CA	Miltex 18-1480	For removal of nictating membrane, protocol 2.7
sedation gas mask	DRE Veterinary, Louisville, KY	#1381	Possible alternative sedation, protocol 4.7
surgical marking pen	Medical Action Industries, Arden, ND	REF 115	Protocol 4.2
sutures, 5-0 Mersilene	Ethicon US, LLC		Ethylene terephthalate sutures, used for deep connective tissue closure, protocol 5.3.11
sutures, Vicryl 6-0	Ethicon US, LLC		Polyglactin 910 sutures, used for superficial muscle and skin closure, protocol 5.3.11
syringe, 1 cc	BD, Franklin Lakes, NJ	ref 309659	For injection of lidocaine/epinephrine, protocol 2.3 & 2.5

syringe, 5 cc	BD, Franklin Lakes, NJ	REF 309603	For infiltration of incision sites; syringe and needle size are not critical, protocol 5.1
tissue forceps, 0.8mm Graefe	Roboz Surgical Store, Gaithersburg, MD	RS-5150	Curved Weck forceps
topical antibiotic ointment (neomycin, polymyxin, bacitracin, and hydrocortisone)	Bausch and Lomb, Tampa, FL	NDC 24208-785-55	Applied after removal of nictating membrane, protocol 2.8, and for postprocedural care, protocol 6.1.2
ultrasound gel	Parker Laboratories, Inc., Fairfield, NJ	Aquasonic 100	To ensure electrical contact with monopolar cautery plate, protocol 4.5
xylazine	Henry Schein Animal Health, Dublin, OH	NADA: 139-236	1 mg/kg, protocol 4.7