

Oxygen-Induced Retinopathy Model for Ischemic Retinal Diseases in Rodents

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Materials

Name	Company	Catalog Number	Comments
33 gauge, Small Hub RN Needle	Hamilton Company	7803-05, 10mm, 25°, PS4	For intravitreal injection
Adobe Photoshop	Adobe Inc.		For image analysis
Air pump air100	Eheim GmbH & Co. KG.	143207	For inhalation anaesthesia
Anaesthesia unit 410 AP	Univentor Ltd.	2360309	For inhalation anaesthesia
AnalaR NORMAPUR Soda lime	VWR International Ltd	22666.362	For CO2 control during model induction
Attane Vet 1000 mg/g	VET MEDIC ANIMAL HEALTH OY	vnr 17 05 79	For inhalation anaesthesia
Brush			For preparation of flat mounts
Carbon dioxide gas			For sacrifice
Celeris D430 ERG system	Diagnosys LLC	121	For <i>in vivo</i> ERG
Cell culture dishes	Greiner Bio-One International GmbH	664 160	For preparation of flat mounts
Cepetor Vet 1 mg/mL	VET MEDIC ANIMAL HEALTH OY	vnr 08 78 96	For anaesthesia
Cover slips	Thermo Fisher Scientific	15165452	For preparation of flat mounts
O2 Controlled InVivo Cabinet, Animal Filtration System and Dehumidifier	Coy Laboratory Products		Closed system for disease model induction, optional for semi-closed system
E702 O2 sensor	BioSphenix, Ltd.	E207, 1801901	For oxygen level measurement
Envisu R2200 Spectral Domain Optical Coherence Tomograph (SD-OCT)	Bioptigen, Inc.	BPN000668	For <i>in vivo</i> imaging
Eye spears	Beaver-Visitec International, Inc.	0008685	For intravitreal injection and <i>in vivo</i> imaging
Flexilux 600LL Cold light source	Mikron	11140	For intravitreal injection or tissue collection
Fluorescein sodium salt	Merck KGaA	F6377-100G	For <i>in vivo</i> imaging
Gas Exhaust unit (+Double 3-way valve, mouse and rat face masks, UNOsorb filter)	UNO Roestvaststaal BV	GEX 17015249	For inhalation anaesthesia
Glass syringe, Model 65 RN	Hamilton Company	7633-01	For intravitreal injection

HRA2 Retina angiograph (FA)	Heidelberg Engineering GmbH	Spec-KT-05488	For <i>in vivo</i> imaging
Isolectin GS-IB4, Alexa Fluor 488 Conjugate	Thermo Fisher Scientific	I21411	For labeling retinal vasculature on flat mounts
Ketaminol Vet 50 mg/mL	Intervet International B.V.	vnr 51 14 85	For anaesthesia
Medicinal Oxygen gas			For disease model induction
Mice C57BL/6JRj	Janvier Labs		Also other strains possible
Microscope slides	Thermo Fisher Scientific	J1800AMNZ	For preparation of flat mounts
Minims Povidone Iodine 5% (unit)	Bausch & Lomb U.K Limited	vnr 24 11 304	For intravitreal injection
Nitrogen gas			For disease model induction (rat)
Oftan Chlora 10 mg/g	Santen Pharmaceutical Co., Ltd.	vnr 55 01 11	For intravitreal injection
Oftan Metacksedrin 100 mg/ml	Santen Pharmaceutical Co., Ltd.	vnr 55 03 43	For <i>in vivo</i> ERG
Oftan Obucain 4 mg/ml	Santen Pharmaceutical Co., Ltd.	vnr 55 03 50	For intravitreal injection
Oftan Tropicamid 5 mg/ml	Santen Pharmaceutical Co., Ltd.	vnr 04 12 36	For <i>in vivo</i> imaging
ProOx Model 110 O2 controller and animal chamber	BioSphenix, Ltd.	803	For disease model induction, semi-closed system, optional for closed system
ProOx Model P360 O2 controller and animal chamber	BioSphenix, Ltd.	538	For disease model induction, semi-closed system, optional for closed system
Rats CD(SD)	Charles River Laboratories		Also other strains possible
Revertor 5 mg/mL	VET MEDIC ANIMAL HEALTH OY	vnr 13 04 97	For anaesthesia reversal
Silica gel			For humidity control during model induction
Systane Ultra 10ml	Alcon	Tamro 2050250	For hydration of the eye
Systane Ultra unit 0.7ml	Alcon	Tamro 2064871	For hydration of the eye
Transfer pipette	Thermo Fisher Scientific	1343-9108	For preparation of flat mounts
VENTI-Line VL 180 PRIME Drying oven	VWR	VL180S 170301	For drying silica gel
VisiScope SZT350 Stereomicroscope	VWR	481067	For intravitreal injection or tissue collection