

Materials List for

A Murine Model of Ischemic Retinal Injury Induced by Transient Bilateral Common Carotid Artery Occlusion

Deokho Lee^{*1,2}, Yukihiro Miwa^{*1,2,3}, Heonuk Jeong^{1,2}, Shin-ichi Ikeda^{1,2}, Yusaku Katada^{1,2}, Kazuo Tsubota^{1,2,4}, Toshihide Kurihara^{1,2}

¹Laboratory of Photobiology, Keio University School of Medicine ²Department of Ophthalmology, Keio University School of Medicine ³Animal eye care, Tokyo Animal Eye Clinic ⁴Tsubota Laboratory, Inc.

* These authors contributed equally

Corresponding Authors

Kazuo Tsubota
tsubota@z3.keio.jp

Toshihide Kurihara
kurihara@z8.keio.jp

Citation

Lee, D., Miwa, Y., Jeong, H., Ikeda, S.i., Katada, Y., Tsubota, K., Kurihara, T. A Murine Model of Ischemic Retinal Injury Induced by Transient Bilateral Common Carotid Artery Occlusion. *J. Vis. Exp.* (), e61865, doi:10.3791/61865 (2020).

Date Published

November 12, 2020

DOI

10.3791/61865

URL

jove.com/video/61865

Materials

| Name | Company | Catalog Number | Comments |
|-----------------------------------|-----------------------------|----------------|------------------------------|
| Atipamezole hydrochloride | Zenoaq | Antisedan | For anti-anesthesia |
| Applied Biosystems 7500 Fast | Applied Biosystems | - | For qPCR |
| Butorphanol tartrate | Meiji Seika Pharma | Vetorphale | For anesthesia |
| BZ-II Analyzer | KEYENCE | - | For an image merge |
| BALB/cAJc1 | CLEA | - | Mouse strain |
| β-Actin (8H10D10) Mouse mAb | CST | 3700 | For western blot |
| Clamp Forcep | World Precision Instruments | WPI 500451 | For surgery |
| Dumont forceps #5 | Fine Science Tools | 11251-10 | For surgery |
| DAPI solution | Dojindo | 340-07971 | For IHC |
| Envisu SD-OCT system | Leica | R4310 | For OCT |
| FITC-dextran | Merk | FD2000S | For retinal blood perfusion |
| Fluorescence microscope | KEYENCE | BZ-9000 | For fluorescence detection |
| Gatifloxacin hydrate | Senju Pharmaceutical | Gachifuro | For anti-bacterial infection |
| GFAP Monoclonal Antibody (2.2B10) | Thermo | 13-0300 | For IHC |
| Heating pad | Marukan | RH-200 | For surgery |
| HIF-1α (D1S7W) XP Rabbit mAb | CST | 36169 | For western blot |
| ImageQuant LAS 4000 mini | GE Healthcare | - | For chemiluminescence |
| Midazolam | Sandoz K.K | SANDOZ | For anesthesia |
| Microtome Tissue-Tek TEC 6 | Sakura | - | For sectioning |
| Medetomidine | Orion Corporation | Domitor | For anesthesia |
| Needle holder | Handaya | HS-2307 | For surgery |
| PuREC | MAYO Corporation | - | For ERG |
| Scissor | Fine Science Tools | 91460-11 | For surgery |
| Sodium hyaluronate | Santen Pharmaceutical | Hyalein | For eye lubrication |

| | | | |
|----------------------------------------|-----------------------|----------|---------------|
| Tropicamide/Penylephrine hydrochloride | Santen Pharmaceutical | Mydrin-P | For mydriasis |
| 6-0 silk suture | Natsume | E12-60N2 | For surgery |