

Materials List for:

Imaging Ca²⁺ Dynamics in Cone Photoreceptor Axon Terminals of the Mouse Retina

Manoj Kulkarni^{1,2}, Timm Schubert^{1,3}, Tom Baden^{1,2,3}, Bernd Wissinger^{4,5}, Thomas Euler^{1,2,3}, Francois Paquet-Durand¹

¹Institute for Ophthalmic Research, University of Tübingen

²Graduate School of Cellular & Molecular Neuroscience, University of Tübingen

³Bernstein Centre for Computational Neuroscience, University of Tübingen

⁴Molecular Genetics Laboratory, University of Tübingen

⁵Centre for Ophthalmology, University of Tübingen

Correspondence to: Thomas Euler at thomas.euler@cin.uni-tuebingen.de, Francois Paquet-Durand at francois.paquet-durand@klinikum.uni-tuebingen.de

URL: <https://www.jove.com/video/52588>

DOI: [doi:10.3791/52588](https://doi.org/10.3791/52588)

Materials

Name	Company	Catalog Number	Comments
High vacuum grease	Dow Corning	1018817	http://www.dowcorning.com
Cover slips	R. Langenbrinck		24 x 60 mm; http://www.langenbrinck.com
Glass slides	R. Langenbrinck		76 x 26 mm; http://www.langenbrinck.com
Blades for tissue chopper	MARTOR KG	ARGENTAX No. 1044	0.25 mm; http://www.martor.de
Tissue chopper	Custom-build		Based on a design by F. Werblin ²³ , adapted by T. Schubert
Nitrocellulose filter membrane gridded	Merck Millipore	AABG01300	Filter type: 0.8 µm; http://www.emdmillipore.com
Isoflurane CP	CP pharma	AP/DRUGS/220/96	http://www.cp-pharma.de
UV/green LED-based full-field stimulator	Custom-build		for details, see ¹⁰
Open source microprocessor board	Arduino		http://www.arduino.cc
Imaging software CfNT	Custom-written		developed by Michael Müller, MPI for Medical Research, Heidelberg, Germany
IgorPro	Wavemetrics		http://www.wavemetrics.com
VC3-4 System focal perfusion system	ALA Scientific Instrument		with 100 µm-diameter tip manifold; http://www.alascience.com/
Mai Tai HP DeepSee (Ti:Sapphire laser)	Newport Spectra-Physics		http://www.spectra-physics.com
Movable objective microscope (MOM), Designed by W. Denk, MPIImF, Heidelberg, Germany	Sutter Instruments		http://www.sutter.com/MICROSCOPES/index.html

Name	Company	Catalog Number	Comments
XLUMPlanFL 20X/0.95w objective	Olympus		http://www.olympusamerica.com
Vaporizer 100 series	Surgivet		http://www.surgivet.com
Ionomycin, Calcium salt	Life technologies	I24222	http://www.lifetechnologies.com
EGTA	Sigma-Aldrich	E3889	https://www.sigmaaldrich.com
Dimethyl sulfoxide (DMSO)	Sigma-Aldrich	101191250	http://www.sigmaaldrich.com

Leica MZ95	leica microsystems		http://www.leica-microsystems.com/
------------	--------------------	--	-------------------------------------------------------------------------------------