

# Calcium Imaging In Electrically Stimulated Flat-Mounted Retinas

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jove.com/video/65705

## Materials

Name	Company	Catalog Number	Comments
20x NA 0.75 S Fluor air objective	Nikon	CFI Super Fluor 20X	-
3.5 cm Cell culture dish	Nunc	12-565-90	-
30 G needle	VWR	613-5373	-
36 G blunt needle	World Precision Instruments	NF36BL-2	-
6 cm Cell culture dish	Nunc	12-565-94	-
AAV2-CAG-GCaMP5G	Vector Biolabs	-	-
Ames' Medium	Sigma Aldrich	A1420	-
Blade	Swann-morton	0308	-
Camera	Hamamatsu	ORCA Flash v4.0	-
Carbogen	Air liquide	-	-
Curved-forceps	-	-	-
Fine spring-scissors	FST	91501-09	-
FITC filter cube	Nikon	Standard series	-
Fluorescent lamp	Nikon	C-HGFI	-
Fluorescent stereomicroscope	Nikon	SMZ25	-
HBSS	Capricorn	HBSS-1A	-
ImageJ/FIJI	NIH	v1.50i	-
In vivo retinal imaging system	Phoenix Research Laboratories	Micron III	-
Inverted fluorescence microscope	Nikon	Eclipse Ti	-
Isofluorane	Arrane Baxter Laboratories	-	-
Long-Evans rat	Janvier	-	-
MATLAB (Version R2021b)	Mathworks	-	-
Media filters	Merckmillipore	SCGPS02RE	-
Methocel 2%	Omni Vision	-	-

Microelectrode array (MEA)	-	Custom-made	
NaHCO <sub>3</sub>	ThermoFisher	42427	-
Penicillin/Streptomycin 100x	ThermoFisher	15140122	-
Phenylephrine	Alcon Cusi Laboratories	653437.3	100 mg/mL
Plastic pipette	VWR	612-1793	-
Porous membrane	Merckmillipore	#JVWP01300	-
Precision syringe	World Precision Instruments	10 µl Nanofil	-
Prescaina	Llorens	-	Oxybuprocaine chlorhydrate (2 mg/mL), local anesthetic
Rat nasal mask	Xenotec	XRK-RA	-
Small curved-forceps	Bbraun	AESCBD311R	-
Spring-scissors	FST	15040-11	-
Stereo microscope	Zeiss	Stemi 2000	-
Straight forceps	FST	11252-20	-
Suture filament	Vitrex Medical	4328	Nilon monofilament, 7/0, DS12
Tobradex	Alcon Cusi Laboratories	-	Tobramycin (3 mg/mL) and dexamethasone (1 mg/mL)
Tropicamide	Alcon Cusi Laboratories	653486	10 mg/mL
Washer	Thorlabs	W8S038	-