

Materials List for:

In Utero Electroporation Approaches to Study the Excitability of Neuronal Subpopulations and Single-cell Connectivity

Carlos G. Briz¹, Marta Navarrete², José A. Esteban², Marta Nieto¹

¹Department for Molecular and Cellular Biology, Centro Nacional de Biotecnología (CNB-CSIC)

²Molecular Neurobiology Department, Centro de Biología Molecular "Severo Ochoa", Consejo Superior de Investigaciones Científicas (CSIC-UAM)

Correspondence to: Marta Nieto at mnlopez@cnb.csic.es

URL: <https://www.jove.com/video/55139>

DOI: [doi:10.3791/55139](https://doi.org/10.3791/55139)

Materials

Name	Company	Catalog Number	Comments
pCAG-Cre	Addgene	13775	
pCALNL-GFP	Addgene	13770	
pCAG-DsRed2	Addgene	15777	
pCAG-GFP	Addgene	11150	
Fast Green	Carl Roth	301.1	
EndoFree Plasmid Maxi Kit	QIAGEN	12362	
Carprofen (Rimadyl)	Pfizer GmbH	1615 ESP	
Isoflurane (IsoFlo)	Abbott (Esteve)	1385 ESP	
Ketamine (Imalgene)	Merial	2528-ESP	
Xylazine (Xilagesic)	Calier	0682-ESP	
Povidone Iodine	Meda	694109.6	
Eye Ointment (Lipolac)	Angelini	65.277	
Hanks' Balanced Salt Solution (HBSS)	Gibco by Life Technologies	24020-091	
Penicillin-Streptomycin	Sigma -Aldrich	P4333	
Scalpel Handle # 3 - 12 cm	Fine Science Tools	10003-12	
Scalpel Blades # 10	Fine Science Tools	10010-00	
Adson Forceps-Serrated - Straight 12 cm	Fine Science Tools	1106-12	
Hardened Fine Scissors - Straight 11 cm	Fine Science Tools	14090-11	
Scissors Mezenbaum-Nelson Curved L=14.5 cm	Teleflex	PO143281	
Thin curved tips - Style 7 Dumoxel	Dumont	0303-7-PO	
Dumont #5 Forceps-Inox	Fine Science Tools	11251-20	
Mathieu Needle Holder - Serrated	Fine Science Tools	12010-14	
AutoClip Applier	Braintree scientific, Inc	ACS APL	
9 mm AutoClips	MikRon Precision, Inc.	205016	
Sutures - Polysorb 6-0	Covidien	UL-101	
Electric Razor	Panasonic	ER 240	
Borosilicate glass capillaries (100 mm, 1.0/0.58 Outer/Inner diameter)	World Precision Instrument Inc.	1B100F-4	
Aspirator tube assemblies for calibrated microcapillary pipettes	Sigma -Aldrich	A5177-5EA	
Gauze (Aposan)	Laboratorios Indas, S.A.U.	C.N. 482232.8	

Cotton Swabs (Star Cott)	Albasa	-	
Needle 25 G (BD Microlance 3)	Becton, Dickinson and Company	300600	
Sucrose	Sigma -Aldrich	S0389	
Paraformaldehyde	Sigma -Aldrich	158127	
OCT Compound	Sakura	4583	
Tissue Culture Dish 100 x 20 mm	Falcon	353003	
GFP Tag Polyclonal Antibody	Thermo Fisher Scientific	A-11122	
Secondary Antibody, Alexa Fluor 488 conjugate	Thermo Fisher Scientific	A-11008	
DAPI	Sigma-Aldrich	D9542	
Fetal Bovine Serum	Thermo Fisher Scientific	10270106	
Triton X-100	Sigma-Aldrich	X100-500ML	
Electroporator ECM 830	BTX Harvard Apparatus	45-0002	
Platinum electrodes 650P 7 mm	Nepagene	CUY650P7	
Microscope for Fluorescent Imaging - MZ10F	Leica	-	
VIP 3000 Isofluorane Vaporizer	Matrx	-	
TCS-SP5 Laser Scanning System	Leica	-	
Axiovert 200 Microscope	Zeiss	-	
Cryostat - CM 1950	Leica	-	
P-97 Micropette Puller	Sutter Instrument Company	P-97	
Patch clamp analysis softwarw (p-Clamp Clampfit 10.3)	Molecular Devices	-	
Acquisition software (MultiClamp 700B Amplifier)	Molecular Devices	DD1440A	
Motorized Micromanipulator + Rotating Base	Sutter Instrument	MP-225	
Air Table	Newport	-	
Miniature Peristaltic Pumps	WPI	-	