

Materials List for:

# Subcellular Patch-clamp Recordings from the Somatodendritic Domain of Nigral Dopamine Neurons

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## Materials

Name	Company	Catalog Number	Comments
Double-distillated water	Millipore	Super Q	Resistivity>14 MΩ cm, ideal 18.2 MΩ cm at 25 °C, filtered (0.22 μm), <a href="https://www.merckmillipore.com/BE/en/product/Super-Q-Plus-Water-Purification-System,MM_NF-C1760">https://www.merckmillipore.com/BE/en/product/Super-Q-Plus-Water-Purification-System,MM_NF-C1760</a>
Microfilter candles	Robu	Porosity 3, 6 mm or 13 mm diameter	
Tissue slicer with vibroprobe	Leica	VT1200	cutting parameters: speed 0.07, amplitude 1.40
Tissue slicer	Dosaka	DTK-1000	cutting parameters: speed 4, frequency 7
Razor blades	Gillette	Super Silver	
Dissection tools	Braun, Aesculap		
Reserve chamber			Custom-made
PP beckers	VWR	213-1725	400 ml
Syringe filter	Merk Millipore	Millex - GV 0.22 μm	
Cyanoacrylate glue	UHU	"Sekunden Kleber"	liquid glue
Recording chamber	Luigs & Neumann	Slice mini chamber	
Horizontal pipette puller	Sutter Instruments	Brown-Flaming P-97	
Pipettes	Hilgenberg	1807524	2 mm o.d./1 mm i.d. glass capillaries, ends firepolished, washed
Dental wax	Coltène/Whaledent		orthodontic tray wax strips
Platinum grid			to anchor slices in the recording chamber, custom made with a platinum disk
Microforge	Narishige	MF-830	to fire-polish pipette tips
Potassium methyl sulfate	MP Biomedicals	215481	
Biocytin	Molecular probes	B1592	
Manometer	GREISINGER electronic	GDH 13 AN	
Microscope	Zeiss	FS	
Dodt Gradient Contrast	Luigs & Neumann		
Manipulators	Luigs & Neumann	LN Mini 25	
Frame grabber	The Imaging Source	DFG/USB2pro	
Camera	DAGE-MTI	NC-70	
Condenser	Zeiss		high numerical aperture condenser working with oil

Objective	Zeiss	W Plan Apochromat 441470-9900 VIS-IR	63X magnification, long-distance, high numerical aperture 1.0 water-immersion objective
Fourfold-changer	Luigs & Neumann		between the camera and the microscope
Black & white video monitor	Sony	SSM-175CE	16-inch, 850 TV lines, analog
Sample Bottles, Amber Glass, with Cap	VWR	215-2409	to transfer slices from the setup to histology room
The Axon Guide	Molecular Devices		Book
Stimfit	<a href="https://github.com/neurodroid/stimfit">https://github.com/neurodroid/stimfit</a>		Analysis of electrophysiological data
Paraformaldehyde	Sigma	441244	see SAFETY DATA SHEET and Dangerous Substances Directive (EU) before use
Well cell culture plate	Greiner-Bio-One	662160	for the staining of fixed slices
Triton X-100	Merk	108643	see SAFETY DATA SHEET and Dangerous Substances Directive (EU) before use
mouse anti-TH monoclonal primary	Immunostar	22941	working concentration: 1/1,000
goat anti-mouse secondary antibody - Alexa Fluor 568	Invitrogen - Thermo Fisher Scientific	A-11031	working concentration: 1/500
Normal goat serum	Dako	X0907	
ProLong Diamond Antifade	Molecular Probes - Thermo Fisher Scientific	P36961	
Fluorescein Avidin DCS	Vector Lab	A-2011	
Confocal microscope	Olympus	FV1000	
ImageJ	<a href="http://imagej.nih.gov/ij/">http://imagej.nih.gov/ij/</a>		
NeuronJ	<a href="http://www.imagescience.org/meijering/software/neuronj/">http://www.imagescience.org/meijering/software/neuronj/</a>		plugin for ImageJ
Imaris	<a href="http://www.bitplane.com">http://www.bitplane.com</a>		Reconstruction of biocytin filled neurons
Neuromantic	<a href="http://www.reading.ac.uk/neuromantic/">http://www.reading.ac.uk/neuromantic/</a>		Reconstruction of biocytin filled neurons
WinWCP	<a href="http://spider.science.strath.ac.uk/sipbs/software_ses.htm">http://spider.science.strath.ac.uk/sipbs/software_ses.htm</a>		Analysis of electrophysiological data