

Materials List for

# Confocal Microscopy to Measure Three Modes of Fusion Pore Dynamics in Adrenal Chromaffin Cells

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## Materials

Name	Company	Catalog Number	Comments
Adenosine 5'-triphosphate magnesium salt	Sigma	A9187-500MG	ATP for preparing internal solution
Atto 655	ATTO-TEC GmbH	AD 655-21	Atto dye to label bath solution
Basic Nucleofector for Primary Neurons	Lonza	VSPI-1003	Electroporation transfection buffer along with kit
Borosilicate capillary glass pipette	Warner Instruments	64-0795	Standard wall with filament OD=2.0 mm ID=1.16 mm Length=7.5 cm
Bovine serum albumin	Sigma	A2153-50G	Reagent for gland digestion
Calcium Chloride 2 M	Quality Biological	351-130-721	Reagent for preparing bath solution
Cell Strainers, 100 µm	Falcon	352360	Material for filtering chromaffin cell suspension
Cesium hydroxide solution	Sigma	232041	Reagent for preparing internal solution and Cs-glutamate/Cs-EGTA stock buffer
Collagenase P	Sigma	11213873001	Enzyme for gland digestion
Coverslip	Neuvitro	GG-14-Laminin	GG-14-Laminin, 14 mm dia.#1 thick 60 pieces Laminin coated German coverslips
D-(+)-Glucose	Sigma	G8270-1KG	Reagent for preparing Locke's solution and bath solution
DMEM	ThermoFisher Scientific	11885092	Reagent for preparing culture medium
EGTA	Sigma	324626-25GM	Reagent for preparing Cs-EGTA stock buffer for bath solution
Electroporation and Nucleofector	Amaxa Biosystems	Nucleofector II	Transfect plasmids into cells
Fetal bovine serum	ThermoFisher Scientific	10082147	Reagent for preparing culture medium
FFN511	Abcam	ab120331	Fluorescent false neurotransmitter to label vesicles
Guanosine 5'-triphosphate sodium salt hydrate	Sigma	G8877-250MG	GTP for preparing internal solution

HEPES	Sigma	H3375-500G	Reagent for preparing Locke's solution
Igor Pro	WaveMetrics	Igor pro	Software for patch-clamp analysis and imaging data presentation
Leica Application Suite X software	Leica	LAS X software	Confocal software for imaging data collection and analysis
Leica TCS SP5 Confocal Laser Scanning Microscope	Leica	Leica TCS SP5	Confocal microscope for imaging data collection
L-Glutamic acid	Sigma	49449-100G	Reagent for preparing Cs-glutamate stock buffer for bath solution
Lock-in amplifier	Heka	Lock-in	Software for capacitance recording
Magnesium Chloride 1 M	Quality Biological	351-033-721EA	Reagent for preparing internal solution and bath solution
Metallized Hemacytometer Hausser Bright-Line	Hausser Scientific	3120	Counting chamber
Microforge	Narishige	MF-830	Polish pipettes to enhance the formation and stability of giga-ohm seals
Millex-GP Syringe Filter Unit, 0.22 µm	Millipore	SLGPR33RB	Material for glands wash and digestion
mNG(mNeonGreen)	Allele Biotechnology	ABP-FP-MNEONSB	Template for PH-mNeonGreen construction
Nylon mesh filtering screen 100 micron	EIKO filtering co	03-100/32	Material for filtering medulla suspension
Patch clamp EPC-10	Heka	EPC-10	Amplifier for patch-clamp data collection
PH-EGFP	Addgene	Plasmid #51407	Backbone for PH-mNeonGreen construction
Pipette puller	Sutter Instrument	P-97	Make pipettes for patch-clamp recording
Potassium Chloride	Sigma	P5404-500G	Reagent for preparing Locke's solution and bath solution
Pulse software	Heka	Pulse	Software for patch-clamp data collection
Recording chamber	Warner Instruments	64-1943/QR-40LP	coverslip chamber, apply patch-clamp pipette on live cells
Sodium chloride	Sigma	S7653-1KG	Reagent for preparing Locke's solution, bath solution and internal solution
Sodium hydroxide	Sigma	S5881-500G	Reagent for preparing Locke's solution
Sodium phosphate dibasic	Sigma	S0876-500G	Reagent for preparing Locke's solution
Sodium phosphate monobasic	Sigma	S8282-500G	Reagent for preparing Locke's solution
Stirring hot plate	Barnsted/Thermolyne	type 10100	Heater for pipette coating with wax
Syringe, 30 mL	Becton Dickinson	302832	Material for glands wash and digestion
Tetraethylammonium chloride	Sigma	T2265-100G	TEA for preparing bath solution
Trypsin inhibitor	Sigma	T9253-5G	Reagent for gland digestion
Type F Immersion liquid	Leica	195371-10-9	Leica confocal mounting oil