

Materials List for:

Preparations and Protocols for Whole Cell Patch Clamp Recording of *Xenopus laevis* Tectal Neurons

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Materials

Name	Company	Catalog Number	Comments
Stemi Stereo 508	Zeiss	495009-0006-000	Dissecting microscope
MS-222 "Tricane"	Finquel	ARF5G	Amphibian general anesthetic
Sodium Chloride (NaCl)	Fisher Scientific	S271-3	Used to prepare Stienberg's solution and external solution
Potassium Chloride (KCl)	Fisher Scientific	P217-500	Used to prepare Stienberg's solution and external solution
HEPES	Sigma-Aldrich	H3375-1KG	Used to prepare Stienberg's solution and external solution
Calcium nitrate tetrahydrate (Ca(NO ₃) ₂ •4H ₂ O)	Sigma-Aldrich	237124-500G	Used to prepare Stienberg's solution
Magnesium Sulfate (MgSO ₄)	Mallinckrodt Chemicals	6066-04	Used to prepare Steinberg's solution
Calcium Chloride (CaCl ₂)	Sigma-Aldrich	C5080-500G	Used to prepare external recording solution
Magnesium Chloride (MgCl ₂)	J.T. Baker	2444-01	Used to prepare external recording solution
D-glucose Anhydrous	Mallinckrodt Chemicals	6066-04	Used to prepare external recording solution
Tubocurarine hydrochloride pentahydrate	Sigma	T2379	Nicotinic acetylcholine receptor antagonist
Insect Pins	Fine Science Tools	26002-10	0.1mm diameter stainless steel pins
Sylgard 184 Silicone Elastomer Kit	Dow Corning	761028	Prewieghed monomer and curing agent kit
Sterile Polystyrene Petri Dish - 60x15mm	Fisher Scientific	AS4052	Small petri dishes
PrecisionGlide Needle 25Gx5/8 (.0.5mm X 16mm)	BD	305122	Syringe needles
1mL Slip Tip Tuberculin Syringe	BD	309659	Disposable, sterile syringes
Borosilicate pipette glass	Sutter Instrument	BF150-86-10HP	Pulled to desired specifications using pipette pulling machine
Flaming/Brown Micropipette Puller	Sutter Instruments	P-97	Fabricates micropipettes for electrophysiology recording
Kimwipes Kimtech wipes	Kimberly-Clark	34120	Delicate task lint-free wipers
Axon Instruments MultiClamp 700B Headstage CV-7B	Molecular Devices	1-CV-7B	Current clamp and voltage clamp headstage
MP-285 Motorized Manipulator with Tabletop Controller	Sutter Instrument	MP-285/T	Control for headstage on electrophysiology rig
Fiber-Coupled LED (Green)	Thorlabs	M530F2	Fiber optic cable paired with green LED

Cluster Bipolar Electrode (25µm diameter)	FHC	30207	Bipolar stimulating electrode
ISO-Flex Stimulator	A.M.P.I. (Israel)	Contact manufacturer	Flexible stimulus isolator
Axon Instruments 700B Multipatch Amplifier	Molecular Devices	2500-0157	Amplifier for voltage- and current-clamp recording
Digidata 1322A digitizer	Molecular Devices	2500-135	Data acquisition system for electrophysiology recording
Axio Examiner.A1	Zeiss	491404-0001-000	Microscope for electrophysiology
Micro-g Lab Table	TMC	63-533	Air table for electrophysiology microscope
Inspiron 620 Personal Desktop Computer with Windows 7 64-bit	Dell	D06D001	Computer running electrophysiology software
c2400 CCD camera	Hamamatsu	70826-5	Charge-coupled device camera for electrophysiology imaging
7 O'Clock Super Platinum Stainless Razorblades	Gillette	CMM01049	Platinum-coated stainless razor blades
Transfer Pipets	Fisher Scientific	13-711-7M	Disposable Polyethylene transfer pipets