

Materials List for:

Electrophysiological Recording from *Drosophila* Trichoid Sensilla in Response to Odorants of Low Volatility

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Materials

Name	Company	Catalog Number	Comments
Prep Setup & Miscellaneous Materials			
Pipette Puller Instrument	Sutter Instruments Novato CA USA	P97	Pipette Puller
Borosilicate Glass Capillaries	World Precision Instruments Sarasota FL USA	1B100F-4	to make holding rods
Aluminosilicate Glass Capillaries	Sutter Instruments Novato CA USA	AF100-64-10	to make electrodes
Superfrost Microscope Slides	Fisher Scientific Pittsburgh PA USA	12-550-143	for fly-prep station
Permanent Double Sided Tape	Scotch St. Paul MN USA	NA	for fly-prep station
Upright microscope	Olympus Shinjuku Tokyo Japan	BX51	for recording rig
Plastalina modeling clay	Van Aken North Charleston SC USA	B0019QZMQQ	for prep station and to stabilize the holding rod
Rapid-Flow Sterile Disposable Filter Unit with SFCA Membrane, 0.45 mm	Nalgene Rochester NY USA	#156-4045	to sterilize AHL solution
Name	Company	Catalog Number	Comments
Cartridge Materials			
200 µL pipette tip	VWR Radnor PA USA	53508-810	to make odor cartridges and fly prep
Filter Paper	Whatman Maidstone Kent UK	740-E	to make odor cartridges
Vacuum Desiccator	Cole-Parmer Vernon Hills IL USA	VX-06514-30	to vaporize ethanol solvent
Name	Company	Catalog Number	Comments
Odorant Materials			
cis-palmitoleic acid	Cayman Chemical Ann Arbor MI USA	#10009871 (CAS # 373-49-9)	Or47b odorant
trans-palmitoleic acid	Cayman Chemical Ann Arbor MI USA	#9001798 (CAS # 10030-73-6)	Or47b odorant
Ethanol	Spectrum Chemical MFG. New Brunswick NJ USA	E1028-500MLGL	to dilute palmitoleic acid
Name	Company	Catalog Number	Comments
Rig Setup Materials			
Odorant Cartridge Micromanipulator	Siskiyou Grants Pass OR USA	MX130R	to position the olfactometer
Flow Vision software	Alicat	FLOWVISIONSC	software to control flow rate

	Tuscon AZ USA		
Mass Controller	Alicat Tuscon AZ USA	MC-2SLPM-D	to control the flow rate for humidified air
Mass Controller	Alicat Tuscon AZ USA	MC-500SCCM-D	to control the flow rate for odor stimulation
Clampex	Molecular Devices Sunnyvale CA USA	Ver. 10.4	Data acquisition software
Air delivery tube	Ace Glass Vineland NJ USA	8802-936	to deliver humidified air
50X objective lens	Olympus Shinjuku Tokyo Japan	LMPLFL50X	recording rig
Clampfit 10	Molecular Devices Sunnyvale CA USA	Ver. 10.4	software for spike analysis
Igor Pro 6	WaveMetrics Lake Oswego OR USA	Ver. 6.37	software for data analysis
Audio Monitor	ALA Scientific Instruments Farmingdale NY USA	NPIEXB-AUDIS-08B	Aurally reports individual spikes
Extracellular Amplifier	ALA Scientific Instruments Farmingdale NY USA	NPIEXT-02F	to increase the amplitude of electrical signals
Valve Controller	Warner Instruments	VC-8	to control the opening of the valve for odor stimulation
Recording Electrode Micromanipulator	Sutter Instruments Novato CA USA	MP-285	to position recording electrode
Headstage Amplifier	ALA Scientific Instruments Farmingdale NY USA	EQ-16.0008	to increase the amplitude of electrical signals
Oscilloscope	Tektronix Beaverton OR USA	TDS2000C	Visual report of individual spikes