

Materials List for:

Pressure-polishing Pipettes for Improved Patch-clamp Recording

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Materials

Name	Type	Company	Catalog Number	Comments
Glass Capillaries	Consumable	Sutter Instrument Co.	BF150-85-10 (or similar)	The method works with any type of capillary except those made from quartz. However, we recommend using capillaries with a filament.
Inverted Microscope	Microscope	Leica Microsystems	DM IL (or similar)	Any simple inverted microscope will do. However, it is essential to have sufficient magnification to see pipettes during polishing. We use a 100x metallurgical lens with a long working distance for this purpose.
Microforge Kit	Tool	ALA Science	CPM-2	Supplies polishing coil, controller and foot pedal.
Air pressure source	Tool	ALA Science	PR-60	Accessory for providing high pressure, includes a suitable valve. Alternatively, compressed air from the building can be used together with a filter/regulator (set to 40 PSI) and a 4-way valve (see below)
4-way valve	Tool	Cole-Parmer	A-98150-01	Fittings will be needed to couple valve to tubing
Pipette Holder with Luer Connector	Tool	World Precision Instruments, Inc.	MPH-6S20	Use a male luer-to-barb fitting to connect pipette holder to high-pressure tubing
Tygon® tubing	Tool	Cole-Parmer	06408-62	Use this tubing to connect pipette holder to 4-way valve