

Materials List for

# The Use of the Patch-Clamp Technique to Study the Thermogenic Capacity of Mitochondria

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## Materials

| Name                                                          | Company                     | Catalog Number            | Comments |
|---------------------------------------------------------------|-----------------------------|---------------------------|----------|
| 0.1% gelatin                                                  | Millipore                   | ES-006-B                  |          |
| 60X water immersion objective, numerical aperture 1.20        | Olympus                     | UPLSAPO60XW               |          |
| Axopatch 200B amplifier                                       | Molecular Devices           |                           |          |
| Borosilicate glass capillaries                                | Sutter Instruments          | BF150-86-10               |          |
| Digidata 1550B Digitizer                                      | Molecular Devices           |                           |          |
| Faraday cage                                                  | Homemade                    |                           |          |
| French Press                                                  | Glen Mills                  | 5500-000011               |          |
| IKA Eurostar PWR CV S1 laboratory overhead stirrer            |                             |                           |          |
| Inversed Microscope                                           | Olympus                     | IX71 or IX73              |          |
| Micro Forge                                                   | (Narishige)                 | MF-830                    |          |
| Micromanipulator MPC-385                                      | Sutter Instruments          | FG-MPC325                 |          |
| Microelectrode holder for agar bridge                         | World Precision Instruments | MEH3F4515                 |          |
| Micropipette Puller                                           | (Sutter Instruments)        | P97                       |          |
| Mini Cell for French Press                                    | Glen Mills                  | 5500-FA-004               |          |
| MIXER IKA 6-2000RPM                                           | Cole Parmer                 | EW-50705-50               |          |
| Objective 100X magnification                                  | Nikon lens                  | MPlan 100/0.80 ELWD 210/0 |          |
| pClamp 10                                                     | Molecular Devices           |                           |          |
| Perfusion chamber                                             | Warner Instruments          | RC-24E                    |          |
| Potter-Elvehjem homogenizer 10 ml                             | Wheaton                     | 358039                    |          |
| Refrigerated centrifuge SORVALL X4R PRO-MD                    | Thermo Scientific           | 75 009 521                |          |
| Small round glass coverslips: 5 mm diameter, 0.1 mm thickness | Warner Instruments          | 640700                    |          |
| Vibration isolation table                                     | Newport                     | VIS3036-SG2-325A          |          |
| <b>Chemicals</b>                                              |                             |                           |          |
| D-gluconic acid                                               | Sigma Aldrich               | G1951                     |          |
| D-mannitol                                                    | Sigma Aldrich               | M4125                     |          |

|                   |               |        |  |
|-------------------|---------------|--------|--|
| EGTA              | Sigma Aldrich | 3777   |  |
| HEPES             | Sigma Aldrich | H7523  |  |
| KCl               | Sigma Aldrich | 60128  |  |
| MgCl <sub>2</sub> | Sigma Aldrich | 63068  |  |
| sucrose           | Sigma Aldrich | S7903  |  |
| TMA               | Sigma Aldrich | 331635 |  |
| TrisBase          | Sigma Aldrich | T1503  |  |
| TrisCl            | Sigma Aldrich | T3253  |  |