

Materials List for:

Single-channel Analysis and Calcium Imaging in the Podocytes of the Freshly Isolated Glomeruli

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Materials

| Name | Company | Catalog Number | Comments |
|--------------------------------------|-----------------------------|-------------------------|---|
| Fluo4 AM | Life Technologies | F14217 | 500 µl in DMSO |
| FuraRed AM | Life Technologies | F-3020 | |
| Poly-L-lysine | Sigma-Aldrich | P4707 | |
| Pluronic acid | Sigma-Aldrich | F-68 | solution |
| Ionomycin | Sigma-Aldrich | I3909-1ML | |
| Tube rotator | Miltenyi Biotec GmbH | 130-090-753 | Germany |
| Nikon confocal microscope (inverted) | Nikon | Nikon A1R | Laser excitation 488 nm. Emission filters 500-550 nm and 570-620 nm |
| Objective | Nikon | Plan Apo 60x/NA 1.4 Oil | |
| Cover Glass | Thermo Scientific | 6661B52 | |
| High vacuum grease | Dow Corning | | Silicone Compound |
| Software | Nikon | Nikon NIS-Elements | |
| Recording/perfusion chamber | Warner Instruments | RC-26 | |
| Patch clamp amplifier | Molecular Devices | MultiClamp 700B | |
| Data acquisition system | Molecular Devices | Digidata 1440A | Axon Digidata® System |
| Low pass filter | Warner Instruments | LPF-8 | 8 pole Bessel |
| Borosilicate glass capillaries | World Precision Instruments | 1B150F-4 | |
| Micropipette puller | Sutter Instrument Co | P-97 | Flaming/Brown type micropipette puller |
| Microforge | Narishige | MF-830 | Japan |
| Motorized micromanipulator | Sutter Instrument Co | MP-225 | |
| Inverted microscope | Nikon | Eclipse Ti | |
| Microvibration isolation table | TMC | | equipped with Faraday cage |
| Multichannel valve perfusion system | AutoMake Scientific | Valve Bank II | |
| Recording/perfusion chamber | Warner Instruments | RC-26 | |
| Software | Molecular Devices | pClamp 10.2 | |
| Nicardipine | Sigma-Aldrich | N7510 | |
| Iberiotoxin | Sigma | I5904-5UG | |
| Niflumic acid | Sigma-Aldrich | N0630 | |
| DIDS | Sigma-Aldrich | D3514-25MG | |
| TEA chloride | Tocris | T2265 | |
| RPMI 1640 | Life Technologies | 11835030 | without antibiotics |
| BSA | Sigma-Aldrich | A8327 | 30% albumin solution |

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|---------------------------------------|--|---------------|---------------------------------------|
| Temperature controlled surgical table | MCW core | | for rodents |
| Steel sieves: | | | #100 (150 μ m), 140 (106 μ m) |
| Gilson, Inc SIEVE 3 SS FH NO200 | Fisher Sci | 50-871-316 | |
| Gilson, Inc SIEVE 3 SS FH NO270 | Fisher Sci | 50-871-318 | |
| Gilson, Inc SIEVE 3 SS FH NO400 | Fisher Sci | 50-871-320 | |
| mesh 200 | Sigma-Aldrich | s4145 | screen for CD-1 |
| Binocular microscope | Nikon | Eclipse TS100 | |
| Binocular microscope | Nikon | SMZ745 | |
| Syringe pump-based perfusion system | Harvard Apparatus | | |
| Polyethylene tubing | Sigma-Aldrich | PE50 | |
| Isoflurane anesthesia |  VetEquip, Inc. | 911103 | |
| Other basic reagents | Sigma-Aldrich | | |