

Materials List for:

# Intranuclear Microinjection of DNA into Dissociated Adult Mammalian Neurons

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URL: <https://www.jove.com/video/1614>

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## Materials

| Name                                  | Company                           | Catalog Number   | Comments                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------|-----------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ultrafree-MC Filter Unit              | EMD Millipore                     | UFC30VV00        | Durapore PVDF filter; 0.1 µm pore-size                                                                                                                                                                                                                                                                                                                                               |
| TE buffer                             | Quality Biological, Inc.          | 351-010-131      | 10 mM Tris, 1 mM EDTA, pH 8.0                                                                                                                                                                                                                                                                                                                                                        |
| Micro-hematocrit capillary tubes      | Fisher Scientific                 | 22-362-574       | Unheparinized Preparation:<br>Soak in 100% ethanol overnight. Wash thoroughly with deionized water three times and dry bake glass in an oven (95°C). Cut the cleaned hematocrit tubes into 3-4 cm length pieces using a diamond-tipped scribe, and seal one end closed with a flame and forceps to hold the glass. Store in a clean glass beaker and cover to prevent dust build-up. |
| Microcentrifuge                       | Eppendorf                         | 5417 R           | With a fixed angle or swinging-bucket rotor                                                                                                                                                                                                                                                                                                                                          |
| Microloader 20 µl pipet tips          | Eppendorf                         | 5242 956.003     |                                                                                                                                                                                                                                                                                                                                                                                      |
| Microinjection capillary glass        | World Precision Instruments, Inc. | TW120F-4         | Thin-walled with filament, 1.2 mm outer-diameter, 0.9 mm inner-diameter, 100 mm length                                                                                                                                                                                                                                                                                               |
| Flaming/Brown Micropipette Puller     | Sutter Instrument Co.             | P-97             | With platinum-iridium box filament (part # FB330B)                                                                                                                                                                                                                                                                                                                                   |
| Nikon Diaphot TMD Inverted Microscope | Nikon Instruments                 |                  | 20x and 40x phase-contrast objective lenses, mounted on a vibration isolation table                                                                                                                                                                                                                                                                                                  |
| Charge-coupled device (CCD) camera    | Cohu Inc.                         | 6410             |                                                                                                                                                                                                                                                                                                                                                                                      |
| Video monitor                         | Sony Corporation                  | PVM-122          | Black and White, 9" screen                                                                                                                                                                                                                                                                                                                                                           |
| Micromanipulator system               | Eppendorf                         | 5171             |                                                                                                                                                                                                                                                                                                                                                                                      |
| Microinjection Unit                   | Eppendorf                         | FemtoJet Express |                                                                                                                                                                                                                                                                                                                                                                                      |
| Microinjection controller             | Contour Design                    | S-PROV2          | Programmable multimedia controller                                                                                                                                                                                                                                                                                                                                                   |
| Igor Pro                              | WaveMetrics                       | Version 4.05A    | Command program to control the microinjection controller written by S. Ikeda                                                                                                                                                                                                                                                                                                         |