

Materials List for:

Direct Imaging of ER Calcium with Targeted-Esterase Induced Dye Loading (TED)

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URL: <https://www.jove.com/video/50317>

DOI: [doi:10.3791/50317](https://doi.org/10.3791/50317)

Materials

| Name | Company | Catalog Number | Comments |
|---|-------------------|----------------|----------|
| (S)-3,5-DHPG (Dihydroxyphenylglycine) | Tocris | 0805 | |
| 5'-ATP-Na ₂ , ATP disodium salt hydrate | Sigma | A26209-1G | |
| B-27 supplement,50x | Invitrogen | 17504-044 | |
| Carbamoylcholine chloride (Charbachol) | Sigma | C4382-1g | |
| Cyclopiazonic acid (CPA) | Ascent scientific | Asc-300 | |
| Dimethylsulfoxide (DMSO) | Sigma | D2650 | |
| DMEM with Glutamax | Invitrogen-Gibco | 31966-047 | |
| Dulbecco's PBS without Ca/Mg 1x | PAA | H15-002 | |
| Fetal calf serum | Invitrogen-Gibco | 10270-106 | |
| Fluo-5N-AM, 10 x 50 µg | Invitrogen | F14204 | |
| Glutamate | Ascent scientific | Asc-049 | |
| Glutamax | Invitrogen | 35050-038 | |
| Ham's F12 nutrients mixture | Invitrogen-Gibco | 21765-029 | |
| Hank's BSS(1x) without Ca,without Mg, with Phenol Red, HBSS | PAA Laboratories | H15-010 | |
| Horse serum | SHD3250YK | Linearis | |
| Ionomycin Ca ²⁺ salt | Ascent scientific | Asc-116 | |
| murine EGF | PreproTech | 315-09 | |
| N2 supplement 100x | Invitrogen | 17502-048 | |
| Neurobasal medium | Invitrogen-Gibco | 21103-049 | |
| Pluronic F127, low UV absorbance,2g | Invitrogen | P6867 | |
| Poly-DL-ornithine hydrobromide PORN | Sigma | P8638 | |
| Poly-D-lysine hydrobromide | Sigma | P7280 | |
| Poly-L-Lysin | Sigma | P2636 | |
| Thapsigargin | Calbiochem | 586005-1mg | |
| TryLE Express | Invitrogen | 12605-028 | |
| Trypsin | Worthington | LS-003707 | |
| Trypsininhibitor from Glycine MAX (soybean) | Sigma | T6522 | |

| Materials | | | |
|--|---|------------|------------------------------------|
| Confocal system: inverted laser scanning microscope: FV1000 with IX81 | Olympus | | user-specific configuration |
| Confocal system: laser combiner FV10 and diode lasers (405, 473, 559, 635) | Olympus | | user-specific configuration |
| Confocal system: scan head FV10-SPD with spectraldetector | Olympus | | user-specific configuration |
| Heater controller TC-344B | Warner Instruments | 64-0101 | to control in line solution heater |
| NIH ImageJ software | WS Rasband, ImageJ, US National Institutes of Health, http://rsb.info.nih.gov/ij/ , 1997–2006 | | |
| Objective: UAPON20XW340 NA 0,7 WD 0,35 | Olympus | N2709100 | |
| Objective: UPLFLN40XO | Olympus | N1478700 | |
| Objective: UPLSAPO60XO/1.35, WD=0.15 | Olympus | N1480700 | |
| Perfusion chamber, inverse | custom-made | | |
| Perfusion chamber, RC-49FS | Warner Instruments | W4 64-1709 | |
| Perfusion tube: PT-49 | Warner Instruments | 64-1730 | for perfusion |
| Peristaltic pump MiniPlus 3 (4 channels) | Gilson | n.a. | perfusion pump |
| Single inline solution heater SH-27B | Warner Instruments | 64-0102 | controlled by heater controller |
| Suction tubes: ST3R | Warner Instruments | 64-1407 | for perfusion |
| Heating insert: Tempocontrol 37-2 digital 2-channel | Pecon | n.a. | |