

Materials List for:

# The Neuromuscular Junction: Measuring Synapse Size, Fragmentation and Changes in Synaptic Protein Density Using Confocal Fluorescence Microscopy

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## Materials

| Name   | Company           | Catalog Number              | Comments  |
|--|-------------------|-----------------------------|---|
| Scanning confocal microscope                   | Leica             | DM 2000 with TCS SP2 system | Most scanning confocal microscopes should be suitable.                            |
|  | Zeiss             | LSM 510 Meta                |   |
|  | Leica             | SPE-II                      |   |
| Alexa555- $\alpha$ -bungarotoxin (red-BGT)     | Life technologies | B35451                      | Used for labelling AChRs  |
| Alexa647- $\alpha$ -bungarotoxin (far-red-BGT) | Life technologies | B35450                      | Far red fluorescence: barely visible through the eyepiece                         |
| rabbit anti-synaptophysin                      | Life technologies | 18-0130                     | Different batches of primary antibody differ in effective working dilution        |
| FITC-anti-rapsyn mab1234                       | Milipore          | FCMAB134F                   | Monoclonal antibody conjugated to FITC  |
| FITC-donkey anti-rabbit IgG                    | Jackson           | 711-095-152                 | Polyclonal secondary antibodies can vary in quality according to source and batch |
| Optimal Cutting Temperature compound (O.T.C.)  | ProSciTech        | IA018                       | Cryostat embedding matrix for freezing muscles                                    |
| DABCO  | Sigma             | 10981                       | Mounting medium that slows photobleaching of fluorophores                         |