

Materials List for:

Visualizing the Live *Drosophila* Glial-neuromuscular Junction with Fluorescent Dyes

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URL: <https://www.jove.com/video/1154>

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Materials

Name	Type	Company	Catalog Number	Comments
HL-6: Artificial <i>Drosophila</i> hemolymph, with 5 mM L-glutamate added, and 2 mM Calcium.	Reagent	N/A	NA	5 mM L-glutamate blocked muscle contractions. We used Molecular grade L-Glutamate (Sigma). 2 mM Calcium is close to physiological Calcium levels in natural larval hemolymph. References: Macleod et al 2002 and Macleod 2004
Dextran, Alex Fluor 680; 10,000 MW, anionic, fixable	Reagent	Molecular Probes, Life Technologies	D34680	Use a small volume perfusion chamber to keep the total volume of dye low
Anti-HRP-CY5 conjugate (goat)	Reagent	Jackson ImmunoResearch	123-175-021	Dilute 2.0 mg into 1 ml ddH ₂ O; aliquot into 4 microliter aliquots. Freeze at -20C. Dilute one aliquot into 100 microliters of HL-6
Alexa 647 antibody labeling kit	Reagent	Molecular Probes, Life Technologies	A10475	We prepared a total of 80 micro liters of conjugated primary antibody, and stored as 2 microliter aliquots. We diluted each aliquot into 100 microliter of HL-6 for labeling.
Custom Formulated Objective Oil, refractive index 1.3379	Reagent	Cargill Labs	Custom Formulated	
Ultra Fine Forceps	Tool	Fine Science Tools	11252-23 or 11295-20	
Spring scissors	Tool	Fine Science Tools	91500-09	
Ultra fine clipper scissors	Tool	Fine Science Tools	15200-00	
Perfusion Chamber RC 20 Series	Tool	Warner Instruments	64-02222	
Spinning Disc confocal	Microscope	Quorum Technologies	Quorum Wave FX	Mounted on a Leica DMI6000 Inverted Microscope