

Materials List for:

Preparation of Neuronal Cultures from Midgastrula Stage Drosophila Embryos

Beatriz Sicaeros¹, Diane K. O'Dowd¹

¹Department of Development and Cell Biology, Department of Anatomy and Neurobiology, University of California, Irvine (UCI)

Correspondence to: Diane K. O'Dowd at dkodowd@uci.edu

URL: <https://www.jove.com/video/226>

DOI: [doi:10.3791/226](https://doi.org/10.3791/226)

Materials

Name	Type	Company	Catalog Number	Comments
Drosophila melanogaster	Animal			Fruit flies
Transferrin	Reagent	Sigma-Aldrich	T-1147	100x Stock: 10 mg/ml in water. Filter through 0.2 um syringe filter (cellulose acetate). Store in 220 ul aliquots (for 20 ml DMEM) at -20C.
Insulin		Sigma-Aldrich	I-6634	200x Stock: 10 mg/ml in 0.05N HCl. Filter through 0.2 um syringe filter (cellulose acetate). Store in 120 ul aliquots (for 20 ml DMEM) at -20C.
Putrescine		Sigma-Aldrich	P-5780	100x Stock: 10 mM in ddH ₂ O. Filter through 0.2 um syringe filter (cellulose acetate). Store in 220 ul aliquots (for 20 ml DMEM) at -20 C
Selenium		Sigma-Aldrich	S-5261	100x Stock: 3 uM in ddH ₂ O. Put 0.0051 g Selenium in a 15 ml tube labeled A (3 mM stock). Add 10 ml of sterile water. Take 10 ul from Tube A to Tube B with 10 ml ddH ₂ O (3 uM stock). Filter Tube B through 0.2 um syringe filter (cellulose acetate). Store in 220 ul aliquots (for 20 ml DMEM) at -20C
Progesterone		Sigma-Aldrich	P-6149	100x Stock: 2 ug/ml1.Add 1ml of 100% EtOH to 0.001 g Progesterone bottle2.Add 49 ml ddH ₂ O3.Transfer 1 ml of this to second tube with 9 ml ddH ₂ O4.Filter through 0.2 um syringe filter (cellulose acetate)5.Store in 220 ul aliquots (for 20 ml DMEM) at -20C
DDM1	Medium			To 10 mls of DMEM add from stocks:100 ul Transferrin, 100 ul Putrescine, 100 ul Selenium, 100 ul Progesterone, 50 ul Insulin
Petri dishes				
Cover-slips		Bellco Glass	1943-00012	Low lead glass, autoclaved.

Paper filter		Whatman, GE Healthcare	#1	
10cc syringe	Tool			
The cultures made in this media must be maintained in a 5% CO2 incubator at about 22-24°C. We use a standard mammalian tissue culture incubator placed in a cold room and heated to 23°C. Always used autoclaved filtered water and make in containers that are reserved for media and supplements only. Never put a pH meter or stir bar used for other purposes in media.				