

Materials List for:

# Dissection and Mounting of *Drosophila* Pupal Eye Discs

Joy S. Tea<sup>1</sup>, Albert Cespedes<sup>1</sup>, Daniel Dawson<sup>2</sup>, Utpal Banerjee<sup>1,3</sup>, Gerald B. Call<sup>2</sup>

<sup>1</sup>Department of Molecular, Cell and Developmental Biology (MCDB), University of California at Los Angeles (UCLA)

<sup>2</sup>Arizona College of Osteopathic Medicine (AZCOM), Midwestern University

<sup>3</sup>MCDB, Broad Stem Cell Research Center, UCLA

Correspondence to: Gerald B. Call at [gcall@midwestern.edu](mailto:gcall@midwestern.edu)

URL: <https://www.jove.com/video/52315>

DOI: [doi:10.3791/52315](https://doi.org/10.3791/52315)

## Materials

Name	Company	Catalog Number	Comments
Phosphate-buffered saline (PBS, pH 7.4)			80 g NaCl, 2g KCl, 14.4 g Na <sub>2</sub> HPO <sub>4</sub> , 2.4 g KH <sub>2</sub> PO <sub>4</sub> , Bring volume to 1 l, adjust the pH to 7.4, autoclave or filter sterilize, dilute to 1x PBS with autoclaved ddH <sub>2</sub> O before using.
Triton X-100	Promega	H5142	Caution: Irritant! Wear gloves.
0.3% PBT			1.5 ml of Triton X-100, 500 ml 1X PBS.
37% formaldehyde solution	Fisher Scientific	F75P1GAL	Caution: Toxic, probable human carcinogen! Wear gloves.
Fix Solution			(≈4% Formaldehyde in PBS) 50 µl of 37% Formaldehyde, 450 µl 1x PBS, make fresh before use
Normal goat serum	Rockland antibodies & assays	B304	Aliquot in 1 ml volumes and store at -80 °C
Block Solution			10% NGS in PBT. This can be made and stored at 4 °C for a few days prior to use.
DAPI stock solution	Life Technologies	D3571	For counterstaining nuclei. Prepare a 1 mg/ml solution with ddH <sub>2</sub> O.
VectaShield Mounting Medium	Vector Labs	H-1000	Mounting medium
Glycerol	Sigma	G5516	For mounting. Prepare 70% dilution with ddH <sub>2</sub> O.
Equipment			
Nutating mixer	VWR	82007-202	Used to rock tissue in 3 well glass dish
SylGard 182 Silicone Elastomer Kit	Krayden	NC9897184	Used to make silicone dissection dish
Silicone dissecting dish			Mix Sylgard elastomer kit (above) according to directions gently (to avoid bubbles). Pour mixture into Petri dish (any size). Allow SylGard to cure overnight in 37 °C incubator.
3 well glass dish	Corning	7220-85	The 3 well variety of these are no longer available, this is the 9 well product.
72 well microwell minitray	Nunc	438733	
Sharp forceps (Dumont #55)	Fine Science Tools	11255-20	

Vannas-type Micro Scissors, Straight, 5mm blade	Ted Pella	1346	
100 mm Borosilicate glass capillaries	World Precision Instruments	1B100-4	Pull with needle puller to make fine point tip that allows a small stream of PBS to flow.
Disposable Transfer Pipets, Fine Tip	Samco Scientific	231	
Tubing dimensions given are inner diameter (ID) x outer diameter (OD) x wall thickness in inches			
PVC tubing (1/8 x 3/16 x 1/32)	Nalgene	8000-0010	Use these with pulled needle to assemble the blower tube as shown in Figure 2.
Tygon Silicone tubing (3/32 x 5/32 x 1/32)	Saint Gobain Performance Plastics	ABW00004	
Tygon Silicone tubing (1/32 x 3/32 x 1/32)	Saint Gobain Performance Plastics	ABW00001	