

Materials List for:

Microdissection of Zebrafish Embryonic Eye Tissues

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Materials

Name	Company	Catalog Number	Comments
Cordless pestle motor	VWR international	47747-370	
DC power supply	Lascar	PSU130	Any DC supply would work. The specific voltage of a different machine will need further optimization.
Disposable pestle & microtube, 1.5 mL (DNase, RNase and pyrogen-free)	VWR international	47747-366	These are used for tissue collection in TRIzol for expression analysis.
Dumont #5 forceps, Tips: 0.05 x 0.01mm, Inox	World Precision Instruments, Inc.	500341	Fine tip dimension is desirable but is not inflexible, as one may need to sharpen the tip from time to time.
Dumont #5SF forceps, Tips: 0.025 x 0.005mm, Inox	Fine Science Tools	11252-00	Fine tip dimension is desirable but is not inflexible, as one may need to sharpen the tip from time to time.
Falcon polystyrene culture plates, 60 X 15 mm	BD Biosciences	351007	These plates are used as dissection plates.
Olympus SZX16 Stereomicroscope	Olympus Corporation	SZX16	Any stereomicroscope would work. We used Leica stereomicroscope in previous studies ¹⁻³ without any issues. We also use the 1X objective exclusively for the dissection even though we have a 2X objective installed.
Sharpening stone	Fine Science Tools	29008-01	Use this to sharpen the tip of the forceps if necessary
Thermo plate	Tokai Hit	MATS-U55SZX2B	This is used to maintain the temperature of the tissue throughout dissection and minimize the influence of temperature fluctuation on gene expression. We also put the whole microscope in an environmentally controlled room at 28°C during dissection in previous studies ¹⁻³ with good success.
Trizol, 100 mL	Invitrogen	15596-026	
tungsten wire, 0.015 inch diameter	World Precision Instruments, Inc.	TGW1510	
Wooden Applicator	Puritan	807	This is used for holding the chemically-etched tungsten needle.