

Materials List for:

# Dechoriation of Medaka Embryos and Cell Transplantation for the Generation of Chimeras

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## Materials

Name	Type	Company	Catalog Number	Comments
Embryo medium	Reagent	Made in-house	N/A	200ml 50X stock solution, 1ml 1% methyleneblue in H <sub>2</sub> O/10 liter RO water (50X stock solution: NaCl 14.7g, KCl 0.6g, CaCl <sub>2</sub> 2H <sub>2</sub> O 2.4g, MgSO <sub>4</sub> 7H <sub>2</sub> O 4.0g/1 litre RO water.)
Micro-dissecting forceps	Tools	55 INOX A.DUMONT&FILS	N/A	Very sharp fine tips for removal of chorion.
Fine waterproof sandpaper - p2000 grit size	Tools	Hermes Abrasives Ltd.	N/A	Very fine grit size for rolling/cleaning embryos with chorions.
3% methylcellulose	Reagent	Sigma	M 0512	High viscosity for holding embryos in place during transplantation.
1X BSS	Reagent	Made in-house	N/A	20XBSS: 130g NaCl, 8g KCl, 4g MgSO <sub>4</sub> ·7H <sub>2</sub> O, 4g CaCl <sub>2</sub> ·2H <sub>2</sub> O, and 10mg Phenol Red in 1L MilliQ water and autoclave; 500mM Hepes in MilliQ water autoclaved. Add 25ml 20XBSS and 15ml 500ml Hepes pH7.0, fill up to 500ml and filter sterilize before use.
Penicillin-streptomycin	Reagent	Gibco	15140-122	Added to BSS when incubating dechorionated embryos.
Pronase	Reagent	Calbiochem	53702	For dechoriation.
Hatching enzyme	Reagent	Made in-house	N/A	For dechoriation.
Tricaine mesilate (TMS)	Reagent	Sigma	A-5040	400mg tricaine in 97.9ml distilled water and 2.1ml 1M Tris, pH adjusted to 7; 4.2ml of this solution in 100ml clean tank water.
3% ultra-low gelling temp. agarose	Reagent	Sigma	A-2576	Type IX-A. Used during embedding of embryos for observation.
Petri dish culture chamber	Tool	Iwaki, Asahi Techno Glass Corp.	11-004-008	Iwaki glass base dish 35mm with 12mm window. Used during embedding of embryos for observation.

Micromanipulator	Equipment	Narishige	N/A	Model MN151. For removal and insertion of cells during transplantation.
Borosilicate glass capillaries	Tool	Harvard Apparatus	GC100-10T	For making transplantation needles.
Flaming/Brown micropipette puller	Equipment	Sutter Instrument Co.	Model P-97	For making transplantation needles.