

Materials List for:

# Ploidy Manipulation of Zebrafish Embryos with Heat Shock 2 Treatment

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## Materials

Name	Company	Catalog Number	Comments
Zebrafish mating boxes	Aqua Schwarz	SpawningBox1	
NaCl	Sigma	S5886	
KCl	Sigma	P5405	
Na <sub>2</sub> HPO <sub>4</sub>	Sigma	S3264	
KH <sub>2</sub> PO <sub>4</sub>	Sigma	P9791	
CaCl <sub>2</sub>	Sigma	C7902	
MgSO <sub>4</sub> ·7H <sub>2</sub> O	Sigma	63138	
NaHCO <sub>3</sub>	Sigma	S5761	
Tricaine	Western Chemical	Tricaine-D (MS 222)	FDA approved (ANADA 200-226)
Tris base	Sigma	77-86-1	to prepare 1 M Tris pH 9.0
HCl	Sigma	920-1	to prepare 1 M Tris pH 9.0
Fish net (fine mesh) (4-5 in)	PennPlax	(ThatFishThatPlace # 212370)	available in ThatFishThatPlace
Plastic spoon			available in most standard stores
Dissecting scissors	Fine Science Tools	14091-09	
Dissecting forceps	Dumont	SS	available from Fine Science Tools
Dissecting stereoscope (with transmitted light source)	Nikon	SMZ645	or equivalent
Reflective light source (LED arms)	Fostec	KL1600 LED	or equivalent
Petri plates 10 cm diameter			any maker
Eppendorf tubes 1.5 ml			any maker
Ice bucket			any maker
Pipetteman P-1000			any maker
Pipette tips 1,000 µl			any maker
Narrow spatula	Fisher	14-374	
Depression glass plate	Corning Inc	722085 (Fisher cat. No 13-748B)	available from Fisher Scientific
UV lamp	UVP	Model XX-15 (cat No. UVP18006201)	available from Fisher Scientific. Although not observed by us with this model, some UV sources have been observed to experience a decrease of intensity over time (if this is the case, see Modifications and Troubleshooting)
UV glasses			any maker
Paper towels			any maker

Kimwipes	Kimberly-Clark	06-666-11	available from Fisher Scientific
Timer stop watch			any maker
Wash bottle	Thermo Scientific	24020500	available from Fisher Scientific
Tea strainer			available in kitchen stores
beakers, 250 ml (2)	Corning Inc.	1000250	available from Fisher Scientific
water bath (2)			any maker, with accuracy to 0.1 C (e.g. Shel Lab H <sub>2</sub> O Bath Series)
Hanks' Solution 1	see above	see above	8.0 g NaCl, 0.4 g KCl in 100 ml ddH <sub>2</sub> O. Store at 4 °C.
Hanks' Solution 2	see above	see above	0.358 g Anhydrous Na <sub>2</sub> HPO <sub>4</sub> , 0.6 g KH <sub>2</sub> PO <sub>4</sub> in 100 ml ddH <sub>2</sub> O. Store at 4 °C.
Hanks' Solution 4	see above	see above	0.72 g CaCl <sub>2</sub> in 50 ml ddH <sub>2</sub> O. Store at 4 °C.
Hank's Premix	see above	see above	add, in the following order: 10.0 ml Solution 1; 1.0 ml Solution 2; 1.0 ml Solution 4; 86.0 ml ddH <sub>2</sub> O; 1.0 ml Solution 5. Store at 4 °C
Hanks' Solution 6	see above	see above	0.33 g NaHCO <sub>3</sub> in 10 ml ddH <sub>2</sub> O. Prepare fresh the morning of the IVF procedure.
Hank's Solution (final solution)	see above	see above	Combine 990 µl of Hank's Premix and 10 µl of freshly made Solution 6 (NaHCO <sub>3</sub> solution)