

Materials List for:

Isolation and Characterization of Single Cells from Zebrafish Embryos

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Materials

Name	Company	Catalog Number	Comments
Supplies			
Dumont #5 forceps	Fine Science Tools	11254-20	For removing the chorion from embryos
Microcentrifuge tube 2 ml	GeneMate	C-3261-1	
40 um cell strainer	Biobasic	SP104151	
35 mm culture dish	Falcon	351008	
FACS tubes topped with 35 um cell strainer	Falcon	352235	
P1000 and tips	Rainin	17005089	
P20 and tips	Rainin	17005091	
IFC chip manufacturer's protocol	Fluidigm	100-6117	Version 100-6117 E1 was used in representative experiment
Wide bore pastuer glass pipette	VWR	14673-010	For transferring embryos
Adult wild type zebrafish	N/A		We used AB line
Adult transgenic zebrafish	N/A		We used Tg(nkx2.5:ZsYellow)
Name	Company	Catalog Number	Comments
Reagents for cell dissociation			
Double distilled water	N/A		
Instant Ocean Sea Salt	Instant Ocean	SS15-10	
NaCl	FisherScientific	S271-3	make stock in water and use for de-yolking buffer
KCl	Sigma Aldrich	P5405	make stock in water and use for de-yolking buffer
NaHCO3	Sigma Aldrich	S6014	make stock in water and use for de-yolking buffer
Leibovitz's L-15	Gibco	21083-027	
FBS	FisherScientific	03-600-511	Heat inactivate; any brand of FBS should be fine
Cell Dissociation Reagent 1 - TrypLE	Life Technologies	12605-010	Store at room temperature.
Cell Dissociation Reagent 2 - FACSmax	Genlantis	T200100	Store -20; thaw on ice; bring to room temp before use
pronase (optional)	Sigma	P5147	
L/D Dye - Sytox Blue	Life Technologies	S34857	Any live/dead stain suitable for flow cytometry will work
Trypan Blue	Gibco	15250-061	
Name	Company	Catalog Number	Comments

Reagents for IFC plate use and qRT-PCR			
Gene-specific probes			Probes will vary by experiment
TaqMan Probe ef1a	Life Technologies	Dr03432748_m1	
TaqMan Probe gata4	Life Technologies	Dr03443262_g1	
TaqMan Probe nk2-5	Life Technologies	Dr03074126_m1	
TaqMan Probe myl7	Life Technologies	Dr03105700_m1	
TaqMan Probe vmhc	Life Technologies	Dr03431136_m1	
TaqMan Probe isl1	Life Technologies	Dr03425734_m1	
TaqMan Gene Expression Master Mix	Life Technologies	4369016	
Reagents listed in IFC manufacturer's protocol			
C1 Reagent Kit	Fluidigm	100-5319	Reagents for loading cells onto IFC plate
Ambion Single Cell-to-CT™	Life Technologies	4458237	Reagents for reverse transcription and pre-amplification steps
Molecular Biology Quality Water	Corning	46-000CM	
C1 IFC for PreAmp (5-10 um)	Fluidigm	100-5757	IFC plate for small cells
Name	Company	Catalog Number	Comments
Equipment			
C1 AutoPrep machine	Fluidigm	100-5477	For IFC plate use
Hemocytometer	Sigma Aldrich	Z359629	For counting cells and assessing cell size
Dissecting microscope			For removing embryos from chorion
Tissue culture microscope			For assessing single cell digestion
FACS machine			For isolating cells of interest