

Materials List for:

Semi-automated Imaging of Tissue-specific Fluorescence in Zebrafish Embryos

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Materials

Name	Company	Catalog Number	Comments
Plastic transfer pipettes; wide bore	Fisher	13-711-23	
Plastic transfer pipettes; fine tip	Fisher	13-711-26	
96-well, round, flat bottom plates	Fisher	21-377-203	
100 x 35 mm plates	Fisher	08-757-100D	
35 x 60 mm plates	Fisher	08-757-100B	
Dumont #5 fine forceps	Fine Science Tools	11254-20	tip dimensions 0.05 x 0.01 mm, for manually removing chorions from embryos
Tricaine methanesulfonate	Sigma Aldrich	A5040-25G	see Zebrafish Book for recipe (http://zfin.org/zf_info/zfbook/chapt10.html#wpthtml63)
1-phenyl 2-thiourea (PTU)	Sigma Aldrich	P7629-10G	Prepare 20 mM stock (100x) and use at 200 µM in E3B
Zeiss Axio Observer Z1	Carl Zeiss		Protocol requires an inverted fluorescence microscope with a motorized stage
20x long working distance objective	Carl Zeiss		We use an objective with 0.4 NA and 8.4 mm working distance
Axiocam HRm digital camera	Carl Zeiss		
ZenBlue 2011 microscope control software	Carl Zeiss		Protocol requires microscopy automation and control software to enable capturing of tiled images using a motorized stage
Methylene Blue	Sigma Aldrich	MB-1; 25 grams	make 2% solution in RO water for use in E3B (below)
E3B			<p>60X E3 SOLUTION: NaCl - 17.2 grams KCl - 0.76 grams CaCl₂-2H₂O - 2.9 grams MgSO₄-7H₂O - 4.9 grams or MgSO₄ - 2.39 grams Dissolve in 1 liter Milli-Q water; store in sterile 1 liter bottle.</p> <p>1X E3B SOLUTION FOR ZEBRAFISH: 60X E3 150 ml 2% methylene blue 100 µl Bring to 9 liters with Milli-Q water</p>