

Materials List for:

Observing Mitotic Division and Dynamics in a Live Zebrafish Embryo

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Materials

Name	Company	Catalog Number	Comments
pCS2 vectors	Gift from K. Kwan		For plasmid of interest
NotI-HF restriction enzyme	New England BioLabs	R3189S	For restriction digest of plasmid
mMessage SP6 kit	Life Technologies	AM1340	For <i>in vitro</i> transcription
RNeasy Mini kit	Qiagen	74104	For purifying mRNA
100 x 15 mm Petri dishes	Fisher Scientific	FB0875712	For housing embryos
microinjection mold	homemade		For holding embryos during microinjection
Agarose II	Amresco	0815-25G	For embedding embryos
Tricaine	Sigma-Aldrich	E10521-10G	For anesthetizing embryos
Sodium Chloride	Sigma-Aldrich	S9888	For embryo water (E3 Blue), dissolved in UltraPure H ₂ O
Potassium Chloride	Sigma-Aldrich	P3911	For embryo water (E3 Blue), dissolved in UltraPure H ₂ O
Calcium Chloride Dihydrate	Sigma-Aldrich	C8106	For embryo water (E3 Blue), dissolved in UltraPure H ₂ O
Magnesium Sulfate	Fisher Scientific	M7506	For embryo water (E3 Blue), dissolved in UltraPure H ₂ O
Methylene Blue Hydrate	Sigma-Aldrich	MB1	For embryo water (E3 Blue), dissolved in UltraPure H ₂ O
100 mm culture tube	Fisher Scientific	50-819-812	For melted agar
35 mm glass coverslip bottom culture dish	MatTek Corp	P35G-0-20-C	No. 0, 20 mm glass, For embedding embryos
#5 tweezers	Dumont	72701-D	For dechorionating embryos
21 G 1 1/2 gauge needle	Becton Dickinson	305167	For positioning embryos in agar
Dissecting microscope	Nikon AZ100		For screening and embedding embryos, any dissecting scope will do
Confocal microscope	Nikon A1+		For time-lapse imaging
Confocal software	NIS Elements AR 4.13.00		For image acquisition and processing