

Materials List for:

# Fluorescent Calcium Imaging and Subsequent In Situ Hybridization for Neuronal Precursor Characterization in *Xenopus laevis*

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URL: <https://www.jove.com/video/60726>

DOI: [doi:10.3791/60726](https://doi.org/10.3791/60726)

## Materials

Name	Company	Catalog Number	Comments
<b>For Animal Husbandry &amp; Cell Culture</b>			
CHORULON (chorionic gonadotropin)	Merck Animal Health		
Gentamycin sulfate salt	Millipore Sigma	G1264	
Penicillin-Streptomycin (10,000 U/mL)	Thermo Fisher Scientific	15140122	
Pyrex petri dishes, 100 mm x 20 mm	Millipore Sigma	CLS3160102	
Corning Falcon Easy-Grip Tissue Culture Dishes, 35mm	Fisher Scientific	08-772A	
Corning Falcon Easy-Grip Tissue Culture Dishes, 60mm	Fisher Scientific	08-772F	
Falcon Standard Tissue Culture Dishes	Fisher Scientific	08-772E	
Thermo Scientific Nunc Cell Culture / Petri Dishes, 35x10mm Dish, Nunclon Delta	Fisher Scientific	12-565-90	
Fisherbrand Standard Disposable Transfer Pipettes, Nongraduated; Length: 5.875 in.; Capacity: 7.7 mL	Fisher Scientific	13-711-7M	
Ethyl 3-aminobenzoate methanesulfonate	Millipore Sigma	E10521	
Collagenase B	Millipore Sigma	11088807001	
Dumont #55 Forceps, Dumostar	Fine Science Tools	11295-51	
Dumont #5 Forceps, Dumostar	Fine Science Tools	11295-00	
Cellattice Micro-Ruled Cell Culture Surface	Nexcelom Bioscience	CLS5-25D-050	
<b>For Calcium Imaging</b>			
Fluo-4, AM, cell permeant	Thermo Fisher Scientific	F14201	
Pluronic F-127, 0.2 µm filtered (10% Solution in Water)	Thermo Fisher Scientific	P6866	
<b>For RNA Probe Generation</b>			
PureYield Plasmid Miniprep System	Promega	A1222	
rATP	Promega	P1132	

rCTP	Promega	P1142	
rGTP	Promega	P1152	
rUTP	Promega	P1162	
Digoxigenin-11-UTP	Millipore Sigma	3359247910	
Rnase Inhibitor	Thermo Fisher Scientific	N8080119	
T3 RNA Polymerase	Promega	P2083	
T7 RNA Polymerase	Promega	P2075	
SP6 RNA Polymerase	Promega	P1085	
RQ1 Rnase-Free Dnase	Promega	M6101	
LiCl Precipitation Solution (7.5 M)	Thermo Fisher Scientific	AM9480	
<b>For Fluorescence In Situ Hybridization</b>			
Acetic Anhydride	Thermo Fisher Scientific	320102	
Blocking Reagent	Millipore Sigma	11096176001	
Anti-Digoxigenin-POD, Fab fragments	Millipore Sigma	11207733910	
Cy3 Mono-Reactive NHS Ester	Millipore Sigma	GEPA13105	
<b>Solution Components</b>			
Calcium chloride, 96% extra pure, powder, anhydrous, ACROS Organixs	Fisher Scientific	AC349610	
Calcium chloride dihydrate	Millipore Sigma	C3306	
CHAPS hydrate	Millipore Sigma	C3023	
Denhardt's Solution (50X)	Thermo Fisher Scientific	750018	
DTT, Molecular Grade (DL-Dithiothreitol)	Promega	P1171	
Ethylenediaminetetraacetic Acid, Disodium Salt Dihydrate	Fisher Scientific	S311	
Ethylene glycol-bis(2-aminoethylether)-N,N,N',N'-tetraacetic acid	Millipore Sigma	E3889	
Formamide (Deionized)	Thermo Fisher Scientific	AM9342	
Herparin sodium salt from porcine intestinal mucosa	Millipore Sigma	H3393	
HEPES (Ultra Pure)	Thermo Fisher Scientific	11344041	
Hydrogen peroxide solution	Millipore Sigma	H1109	
L-Cysteine	Millipore Sigma	168149	
Magnesium chloride, pure, ACROS Organixs	Fisher Scientific	AC223211000	
Magnesium sulfate, 97% pure, ACROS Organixs, anhydrous	Fisher Scientific	AC413480050	
Maleic Acid, 99%, ACROS Organixs	Fisher Scientific	ACS125231000	
MOPS (Fine White Crystals/ Molecular Biology), Fisher BioReagents	Fisher Scientific	BP308	
Potassium chloride	Millipore Sigma	P9541	
Ribonucleic acid from torula yeast, Type IX	Millipore Sigma	R3629	
Sodium chloride	Millipore Sigma	S7653	
Triethanolamine	Millipore Sigma	90279	

Tris	Millipore Sigma	GE17-1321-01	
TWEEN 20	Millipore Sigma	P9416	
<b>Equipment</b>			
Laminar Flow Hood	model of choice		
Dissecting Microscope	model of choice		
Inverted Fluorescence Microscope	Nikon	TE200	
NIS-Elements Imaging Software	Nikon		
Shaking Incubator	model of choice		
Refrigerated Centrifuge	model of choice		
<b>Miscellaneous</b>			
Corning bottle-top vacuum filter system, 0.22 µm pore, 500 mL bottle capacity	Millipore Sigma	CLS430769	
Falcon 50mL Conical Centrifuge Tubes	Fisher Scientific	14-432-22	