

Materials List for:

Technique to Target Microinjection to the Developing *Xenopus* Kidney

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Materials

Name	Company	Catalog Number	Comments
Sodium chloride	Fisher	S271-3	
Potassium chloride	Fisher	P217-500	
Magnesium sulfate	Fisher	M63-500	
Calcium chloride	Fisher	C79-500	
HEPES	Fisher	BP310-500	
EDTA	Fisher	S311-500	
Gentamycin solution, 50 mg/ml	Amresco	E737-20ML	
L-Cysteine, 99%+	Acros Organics	52-90-4	
Ficoll	Fisher	BP525-100	
100 mm x 15 mm Petri dish	Fisher	FB0875712	
Mini Fridge II	Boekel	260009	Benchtop incubator for embryos.
Gap43-RFP plasmid			For making tracer RNA. Ref: Davidson <i>et al.</i> , 2006.
Rhodamine dextran, 10,000 M.W.	Invitrogen	D1817	Tracer.
Molecular biology grade, USP sterile purified water	Corning	46-000-CI	
7" Drummond replacement tubes	Drummond	3-000-203-G/XL	Microinjection needles.
Needle puller	Sutter Instruments	P-30	
Fine forceps	Dumont	11252-30	For breaking microinjection needle tip.
Nanoject II	Drummond	3-000-204	Microinjector.
Mineral oil, heavy	Fisher	CAS 8042-47-5	Oil for needles.
27 G Monoject hypodermic needle	Covidien	8881200508	For loading mineral oil into microinjection needle.
5 ml Luer-Lok syringe	BD	309646	For loading mineral oil into microinjection needle.
60 mm x 15 mm Petri dish	Fisher	FB0875713A	
800 micron Polyester mesh	Small Parts	CMY-0800-C	
Transfer pipets	Fisher	13-711-7M	For transferring embryos. Cut off the tip so that the embryos are easily taken up by the pipette.
6-well cell culture plate	Nest Biotechnology		
MOPS	Fisher	BP308-500	
EGTA	Acros Organics	67-42-5	
Formaldehyde	Fisher	BP531-500	

15 mm x 45 mm Screw thread vial	Fisher	03-339-25B	For fixing, staining, and storing embryos.
24-well cell Culture plate	Nest Biotechnology		
Benzocaine	Spectrum	BE130	
Ethanol	Fisher	BP2818-4	
Methanol	Fisher	A412-4	
Phosphate buffered saline (PBS) 1x powder	Fisher	BP661-50	
Bovine serum albumen	Fisher	BP1600-100	
Triton X-100	Fisher	BP151-500	
3D Mini rocker, model 135	Denville Scientific	57281	
Goat serum, New Zealand origin	Invitrogen	16210064	
Sodium azide	Fisher	S2271-25	
Monoclonal 3G8 antibody	European Xenopus Resource Centre		Primary antibody to label proximal tubules.
Monoclonal 4A6 antibody	European Xenopus Resource Centre		Primary antibody to label intermediate, distal and connecting tubules.
anti-RFP pAb, purified IgG/rabbit	MBL	PM005	Primary antibody to label Gap43-RFP tracer.
Alexa Fluor 488 goat anti-mouse IgG	Life Technologies	A11001	Secondary antibody to label kidney tubules.
Alexa Fluor 555 goat anti-rabbit IgG	Life Technologies	A21428	Secondary antibody to label Gap43-RFP tracer.
9 Cavity spot plate	Corning	7220-85	
Benzyl benzoate	Fisher	105862500	Optional - for clearing embryos
Benzyl alcohol	Fisher	A396-500	Optional - for clearing embryos