

Materials List for:

# Primordial Germ Cell Transplantation for CRISPR/Cas9-based Leapfrogging in *Xenopus*

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## Materials

Name	Company	Catalog Number	Comments
Dumont #5 forceps	Fine Science Tools	11252-20 or 11252-30	
Eyebrow hair knife			Homemade
Hair loop			Homemade
Pasteur pipettes, borosilicate glass	Fisher Scientific	13-678-20A	
Krazy Glue (Cyanoacrylate-based)	Elmer's Products, Inc.	KG581	To affix eyebrow hair and hair loops into Pasteur pipettes, other similar glues can be used.
Oligodeoxynucleotides, custom ordered	Integrated DNA Technologies	Custom ordered	Template oligos for sgRNA synthesis, see Nakayama et al., 2014 for design details.
Megascript T7 kit	Ambion/ThermoFisher	AM1334	Or use Megashortscript T7 (AM1354) kit
Phenol, Tris buffered			High quality distilled phenol from any commercial supplier
Chloroform			High quality chloroform from any commercial supplier
Ethanol			High quality ethanol from any commercial supplier
Diethylpyrocarbonate (DEPC)	Sigma Chemical Co.	D5758-50ML	
Cas9 protein, with nuclear localization signal	PNA Bio, Inc.	CP01	Reconstituted using DEPC-treated water according to manufacturer's recommendations
10X Marc's Modified Ringers solution			Homemade. Recipe (ref 26) for 1X MMR (lacking EDTA) is 100mM NaCl, 2 mM KCl, 1 mM MgSO <sub>4</sub> , 2 mM CaCl <sub>2</sub> , 5 mM HEPES. Solution is pH adjusted to 7.4.
Agarose			Any Molecular Biology grade agarose is sufficient
60 X15 mm Petri plates	Falcon	351007	
24-well plates	Falcon	3047	
L-Cysteine	Sigma Chemical Co.	C7352-100G	Free base, not HCl salt
Proteinase K	Roche	03 115 828 001	Typically ~20mg/ml from Roche
sera Micron	sera		Tadpole food. Resuspend in growth medium. Can be purchased from a variety of online retailers