

Materials List for:

Immunization of Adult Zebrafish for the Preclinical Screening of DNA-based Vaccines

Henna Myllymäki^{*1}, Mirja Niskanen^{*1}, Kaisa Oksanen^{1,2}, Mika Rämetsä^{1,3,4,5}

¹BioMediTech Institute, Faculty of Medicine and Life Sciences, University of Tampere

²MedEngine Oy

³Department of Pediatrics, Tampere University Hospital

⁴Department of Children and Adolescents, Oulu University Hospital

⁵PEDEGO Research Unit, Medical Research Center, University of Oulu

* These authors contributed equally

Correspondence to: Mika Rämetsä at mika.rametsa@uta.fi

URL: <https://www.jove.com/video/58453>

DOI: [doi:10.3791/58453](https://doi.org/10.3791/58453)

Materials

Name	Company	Catalog Number	Comments
pCMV-GFP plasmid	Addgene	#11153	
2-propanol	Sigma-Aldrich	278475-2L	DNA extraction
Ampicillin sodium salt	Sigma-Aldrich	A0166-5G	
Chloroform	Merck	1.02445.2500	DNA extraction
ECM Electro Square Porator	BTX Harvard apparatus	BTX ECM 830	
FastPrep-24 5G	MP Biomedicals	116005500	homogenizer
Flaming/brown micropipette puller	Sutter Instrument Co.	P-97	Pulling of needles
GeneJet PCR Purification kit	ThermoFischer Scientific	K0701	
GFP ELISA kit	Cell Biolabs, Inc.	AKR-121	
Guanidine thiocyanate (FW 118.2)	Sigma-Aldrich	G9277-500G	DNA extraction
ImageJ2	imagej.net/Downloads		freely available software
LB Agar	Sigma	L2897-1kg	
LB Broth (Miller)	Sigma	L3522-1kg	
Micromanipulator	Narishige	MA-153	
Microscope	Nikon	AZ100	fluorescence microscope
Microscope	Olympus	ZS61	
Nightsea Full adapter system w/ Royal Blue Color light head	Electron Microscopy Sciences	SFA-RB	
PBS tablets	VWR Chemicals	E404-200TABL.	
Phenol red sodium salt	Sigma-Aldrich	114537-5G	
PV830 Pneumatic Pico Pump	WPI	SYS-PV830	
QIAGEN Plasmid Maxi kit	Qiagen	ID:12163	plasmid extraction
Sodium citrate (FW294.1)	VWR Chemicals	27833.294	DNA extraction
Tri Reagent	Molecular Research Center, Inc.	TR 118	DNA extraction
Tricaine (ethyl 3-aminobenzoate methanesulfonate salt)	Sigma	A5040-100g	anesthesia and euthanasia solution
Tris (free base) (FW121.14)	VWR Life Science	0497-500G	DNA extraction
Tweezertrodes Electrodes (7 mm) Kits	BTX Harvard apparatus	BTX 450165	tweezer type electrodes
2.8 mm Ceramic beads	Omni International	19-646-3	DNA extraction
2 mL Tough tubes with caps	Omni International	19-649	DNA extraction

Aluminosilicate capillaries	Harvard apparatus	30-0108	
Microloader 20 µL	eppendorf	5242956.003	loading tips
Petri dishes, 16 mm	Sarsted	82.1473	
Scalpels	Swan Morton	0501	
Parafilm	Bemis		laboratory film
Pins			
Plastic spoon			
Spatula			
Sponge			
Styrofoam workbench			
Tweezers			