

Materials List for:

**In Vivo Modeling of the Morbid Human Genome using *Danio rerio***

Adrienne R. Niederriter<sup>1,2</sup>, Erica E. Davis<sup>1,3</sup>, Christelle Golzio<sup>1</sup>, Edwin C. Oh<sup>1</sup>, I-Chun Tsai<sup>1</sup>, Nicholas Katsanis<sup>1</sup>

<sup>1</sup>Center for Human Disease Modeling, Department of Cell Biology, Duke University Medical Center

<sup>2</sup>Department of Evolutionary Anthropology, Duke University

<sup>3</sup>Department of Pediatrics, Duke University Medical Center

Correspondence to: Nicholas Katsanis at [nicholas.katsanis@duke.edu](mailto:nicholas.katsanis@duke.edu)

URL: <https://www.jove.com/video/50338>

DOI: [doi:10.3791/50338](https://doi.org/10.3791/50338)

**Materials**

Name	Company	Catalog Number	Comments
<b>Reagent</b>			
Phusion High-Fidelity DNA Polymerase	NEB	M0530S, M0530L	
DpnI restriction endonuclease	NEB	R0176L, R0176S	
Max Efficiency DH5α competent cells	Invitrogen	18258-012	
Big Dye Terminator	Applied Biosystems	4337455	
mMESSAGE mMACHINE Kit	Invitrogen	AM1340, AM1344, AM1348	
Morpholino	Gene-Tools	n/a	
1-phenyl-2-thiourea (PTU)	Sigma Aldrich	P7629	Prepare as 0.003% PTU in embryo media
Paraformaldehyde (PFA)	Sigma Aldrich	P6148	For embryos that must be fixed prior to phenotyping, prepare as 4%
Tricaine methane sulfonate	Western Chemical	N/A	For anesthetization and euthanasia
<b>Equipment</b>			
PTC-225 Tetrad Thermal Cycler	BioRad	Any equivalent thermal cycler	
Nano Drop 2000 spectrophotometer	Thermo Scientific		
SMZ 745T Stereomicroscope	Nikon		
AZ100 Stereomicroscope	Nikon		
DS Fi1 Digital Camera	Nikon	For color/fluorescent imaging	
DS QiMC Digital Camera	Nikon	For black/white imaging	
Advanced Resarch 3.2 Imaging Software	NIS- Elements		