

Materials List for:

# Genome Editing in *Astyanax mexicanus* Using Transcription Activator-like Effector Nucleases (TALENs)

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## Materials

Name	Company	Catalog Number	Comments
<b>Equipment</b>			
Thermocycler			
Injection station			
Gel apparatus			
Needle puller			
Nanodrop			
Name	Company	Catalog Number	Comments
<b>Supplies</b>			
Note: As far as we know, supplies from different companies can be used unless otherwise indicated			
Golden Gate TALEN and TAL Effector Kit 2.0	Addgene	Kit #1000000024	
Fisher BioReagents LB Agar, Miller (Granulated)	Fisher	BP9724-500	
Fisher BioReagents Microbiology Media: LB Broth, Miller	Fisher	BP1426-500	
Teknova TET-15 in 50% EtOH	Teknova (ordered through Fisher)	50-843-314	
Spectinomycin Dihydrochloride, Fisher BioReagents	Fisher	BP2957-1	
Super Ampicillin (1,000x solution)	DNA Technologies	6060-1	
ThermoScientific X-Gal Solution, ready-to-use	Thermo Sci Fermentas Inc (Ordered through Fisher)	FERR0941	
IPTG, Fisher BioReagents	Fisher	BP1620-1	
Petri dishes	Fisher	08-757-13	
Bsal	New England Biolabs (ordered through Fisher)	50-812-203	Use Bsal, not Bsal-HF (as described in the Golden Gate TALEN and TAL Effector Kit protocol)
BSA	New England Biolabs	provided with restriction enzymes	
10x T4 ligase buffer	Promega (ordered through Fisher)	PR-C1263	
GoTaq Green Master mix	Promega (ordered through Fisher)	PRM7123	Other Taq can be used, but the reaction should be adjusted accordingly
Quick ligation kit	New England Biolabs (ordered through Fisher)	50-811-728	We use Quick Ligase for all TALEN assembly reactions

One Shot TOP10 Chemically Competent E.coli	Invitrogen	C4040-06	Other chemically competent cells or homemade competent cells can be used
<i>Esp</i> 3I	Thermo Sci Fermentas Inc (Ordered through Fisher)	FERER0451	
Plasmid-Safe ATP-dependent DNase	Epicentre (Ordered through Fisher)	NC9046399	
QIAprep Spin Miniprep Kit	Qiagen	27106	The Qiagen kit should be used for the initial plasmid preparation (as described in the Golden Gate TALEN and TAL Effector Kit protocol)
QIAquick PCR Purification Kit	Qiagen	28104	
GeneMate LE Quick Dissolve Agarose	BioExpress	E-3119-125	
Sac I	Promega (Ordered through Fisher)	PR-R6061	
mMESSAGE mMACHINE T3 Transcription kit	Ambion	AM1348M	
Rneasy MinElute Cleanup Kit	Qiagen	74204	
NorthernMax-Gly Sample Loading Dye	Ambion (ordered through Fisher)	AM8551	
Eliminase	Decon (ordered through Fisher)	04-355-32	
Fisherbrand Disposable Soda-Lime Glass Pasteur Pipets	Fisher	13-678-6B	
Standard Glass Capillaries	World Precision Instruments	1B100-4	
Microcaps	Drummond Scientific Company	1-000-0010	
Eppendorf Femtotips Microloader Tips for Femtojet Microinjector	Eppendorf (ordered through Fisher)	E5242956003	
Sodium hydroxide	Fisher	S318-500	
Tris base	Fisher	BP152-1	