Resource Summary Report

Generated by RRID on Aug 17, 2026

zgc:111821_L (OZ597)

RRID:Addgene_35237
Type: Plasmid

Proper Citation

RRID:Addgene_35237

Plasmid Information

URL: http://www.addgene.org/35237

Proper Citation: RRID:Addgene_35237

Insert Name: Zinc finger array targeting zgc:111821

Organism: Danio rerio

Bacterial Resistance: Kanamycin

Defining Citation: PMID:18657511

Vector Backbone Description: Backbone Size:5493; Vector Backbone:MG414; Vector Types:Zebrafish Targeting; Bacterial Resistance:Kanamycin

Comments: This plasmid encodes a zinc finger array targeting half of a target sequence in the zebrafish gene zgc:111821. Please note that this plasmid does NOT contain the zgc:111821 sequence. Users must order the complementary plasmid zgc:111821_R (OZ598) [Addgene plasmid 35238] in order to create a zinc finger nuclease (ZFN) pair to introduce targeted mutations into this specific zebrafish gene. Users will also need to clone the zinc finger (ZF) insert of this plasmid into a zinc finger nuclease (ZFN) vector to express a FOKI fusion product. Examples of possible ZFN expression vectors that can be used are: pST1374 (Addgene plasmid 13426), pMLM290/292 (Addgene plasmids 21872 & 21873), pMLM800/802 (Addgene plasmids 27202 & 27203). The difference between pMLM800/802 and pMLM290/292 is the length of the “spacer” sequence in the full ZFN target site. If the spacer is 7 bp, scientists should use pMLM800/802. If the spacer is 5 or 6 bps, scientists should use pMLM290/292. pMLM290/292 is identical to pST1374 except that it harbors two mutations in the FokI nuclease domain (Q486E, I499L; aka the “-“ mutation see Miller et al., Nat. Biotech 2007, PMID 17603475) which confers heterodimeric behavior on these domains This zinc finger array was tested for binding activity to the sequence 5'-GCTGCTGCC-3' in a bacterial two hybrid assay, and resulted in 3.61 fold activation. However, this array has not yet been tested for activity as a zinc finger nuclease (i.e. for its ability to induce mutations at the intended locus). Scientists

using this zinc finger array in a publication should notify zebrafishzfs@zincfingers.org and acknowledge NIH grant number R01 GM088040 in the publication. Other Articles: "Oligomerized pool engineering (OPEN): an 'open-source' protocol for making customized zinc-finger arrays." Maeder ML et al. (Nat Protoc. 2009 Sept 17. 4(10):1471-1501. Pubmed ID: 19798082) "Targeted mutagenesis in zebrafish using customized zinc-finger nucleases." Foley JE et al. (Nat Protoc. 2009 Dec 3. 4(12):1855-1867. Pubmed ID: 20010934)

Plasmid Name: zgc:111821_L (OZ597)

Record Creation Time: 20220422T222150+0000

Record Last Update: 20260815T081405+0000

Ratings and Alerts

No rating or validation information has been found for zgc:111821_L (OZ597).

No alerts have been found for zgc:111821_L (OZ597).

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 1 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID .

Najjar K, et al. (2017) An l- to d-Amino Acid Conversion in an Endosomolytic Analog of the Cell-penetrating Peptide TAT Influences Proteolytic Stability, Endocytic Uptake, and Endosomal Escape. The Journal of biological chemistry, 292(3), 847.