Resource Summary Report

Generated by dkNET on Jul 29, 2026

pMLM292

RRID:Addgene_21873
Type: Plasmid

Proper Citation

RRID:Addgene_21873

Plasmid Information

URL: http://www.addgene.org/21873

Proper Citation: RRID:Addgene_21873

Bacterial Resistance: Ampicillin

Defining Citation: PMID:20010934

Vector Backbone Description: Backbone Size:5725; Vector Backbone:pMLM292; Vector Types:Mammalian Expression, zebrafish expression; Bacterial Resistance:Ampicillin

Comments: Zinc fingers are cloned in between the unique XbaI and BamHI sites. This results in an expression vector which encodes a ZFN with the OPEN zinc finger array fused to the mutant FokI nuclease domain. pMLM292 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 235- 822: CMV promoter / 771-775: CAAT box / 804-808: TATA box / 819: 3' end of hCMV / 904-906: ZFN start codon / 910-930: SV40 nuclease localization signal (NLS) / 940- 963: FLAG tag / 964- 969: XbaI site / 980- 985: BamHI site / 986-1573: FokI nuclease domain / 1292&1294: Q486E heterodimer FokI mutation / 1331: I499L heterodimer FokI mutation / 1574-1576: ZFN stop codon / 1686-1910: BGH polyadenylation sequence / 1956-2384: f1 origin / 2411-2720: SV40 early promoter and origin / 2775-2841: EM-7 Promoter / 2842-3240: Blasticidin resistance gene / 3398-3528: SV40 late polyA signal / 3955-4574: pUC origin / 4729-5589: ampicillin (bla) resistance gene (complementary strand) / 5590-5688: bla promoter (complementary strand)

Plasmid Name: pMLM292

Record Creation Time: 20220422T222057+0000

Record Last Update: 20260725T074428+0000

Ratings and Alerts

No rating or validation information has been found for pMLM292.

No alerts have been found for pMLM292.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 6 mentions in open access literature.

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

Won M, et al. (2015) Lnx2 ubiquitin ligase is essential for exocrine cell differentiation in the early zebrafish pancreas. Proceedings of the National Academy of Sciences of the United States of America, 112(40), 12426.

Larcher T, et al. (2014) Characterization of dystrophin deficient rats: a new model for Duchenne muscular dystrophy. PloS one, 9(10), e110371.

Sood R, et al. (2013) Efficient methods for targeted mutagenesis in zebrafish using zinc-finger nucleases: data from targeting of nine genes using CompoZr or CoDA ZFNs. PloS one, 8(2), e57239.

Zhang X, et al. (2013) An over expression APP model for anti-Alzheimer disease drug screening created by zinc finger nuclease technology. PloS one, 8(11), e75493.

Dreyer AK, et al. (2012) Zinc-finger nucleases-based genome engineering to generate isogenic human cell lines. Methods in molecular biology (Clifton, N.J.), 813, 145.

Ramirez CL, et al. (2012) Engineered zinc finger nickases induce homology-directed repair with reduced mutagenic effects. Nucleic acids research, 40(12), 5560.