Resource Summary Report

Generated by FDI Lab - SciCrunch.org on May 18, 2025

lenti-sgRNA puro

RRID:Addgene_104990 Type: Plasmid

Proper Citation

RRID:Addgene_104990

Plasmid Information

URL: http://www.addgene.org/104990

Proper Citation: RRID:Addgene_104990

Bacterial Resistance: Ampicillin

Defining Citation: PMID:30894629

Vector Backbone Description: Backbone Marker:Brett Stringer from Feng Zhang plasmid lentiCRISPR v2 (Addgene plasmid #52961); Backbone Size:10638; Vector Backbone:lentiCRISPRv2 puro (Addgene #98290); Vector Types:Mammalian Expression, Lentiviral, CRISPR; Bacterial Resistance:Ampicillin

Comments: This 3rd generation lentiviral plasmid expresses a S. pyogenes CRISPR chimeric RNA element with a customizable sgRNA from a U6 promoter and puromycin resistance from an EF-1a core promoter. This plasmid does NOT contain Cas9. It should be used in conjunction with lentiCas9 hygro, lentiCas9 neo or lentiCas9 blast or with cell lines expressing Cas9. After cloning a double-stranded oligonucleotide specifying a gRNA between the two BsmBI restriction sites, use hU6-F (5'-GAGGGCCTATTTCCCATGATT-3') or LKO.1 5'(5'- GACTATCATATGCTTACCGT-3') to sequence the chimeric RNA element. Instruction for gRNA double-stranded oligonucleotide design and cloning can be found in the Zhang lab protocol, https://media.addgene.org/data/plasmids/52/52961/52961-attachment_B3xTwla0bkYD.pdf lentiGuide puro is essentially the same as the Feng Zhang lab plasmid lentiGuide-Puro (Plasmid #52963) but lacks one of the two Mlul restriction sites, permitting subcloning of alternative selectable markers (e.g. hygro, neo, blast) between the Xbal and remaining Mlul restriction site.

Plasmid Name: lenti-sgRNA puro

Record Creation Time: 20220422T221509+0000

Record Last Update: 20231115T080037+0000

Ratings and Alerts

No rating or validation information has been found for lenti-sgRNA puro.

No alerts have been found for lenti-sgRNA puro.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 5 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Bayley R, et al. (2022) H3K4 methylation by SETD1A/BOD1L facilitates RIF1-dependent NHEJ. Molecular cell, 82(10), 1924.

Belan O, et al. (2022) POLQ seals post-replicative ssDNA gaps to maintain genome stability in BRCA-deficient cancer cells. Molecular cell, 82(24), 4664.

Sarel-Gallily R, et al. (2022) Genome-wide analysis of haploinsufficiency in human embryonic stem cells. Cell reports, 38(13), 110573.

Barone C, et al. (2021) Sox2-dependent maintenance of mouse oligodendroglioma involves the Sox2-mediated downregulation of Cdkn2b, Ebf1, Zfp423, and Hey2. Glia, 69(3), 579.

Hewitt G, et al. (2021) Defective ALC1 nucleosome remodeling confers PARPi sensitization and synthetic lethality with HRD. Molecular cell, 81(4), 767.