Resource Summary Report

Generated by FDI Lab - SciCrunch.org on Apr 7, 2025

pMDLg/pRRE

RRID:Addgene_12251
Type: Plasmid

Proper Citation

RRID:Addgene_12251

Plasmid Information

URL: http://www.addgene.org/12251

Proper Citation: RRID:Addgene_12251

Insert Name: HIV-1 GAG/POL

Bacterial Resistance: Ampicillin

Defining Citation: PMID:9765382

Vector Backbone Description: Backbone Size:8895; Vector Backbone:pMD; Vector Types:Mammalian Expression, Lentiviral, Other, Packaging; Bacterial Resistance:Ampicillin

Comments: Please note that this plasmid runs as a dimer (>17kb). While this may reduce DNA yield, it is not expected to impact function. This 3rd generation LV packaging plasmid includes gag, coding for the virion main structural proteins; pol, responsible for the retrovirus-specific enzymes; and RRE, a binding site for the Rev protein which facilitates export of the RNA from the nucleus. This plasmid does not include Rev. The third generation packaging system offers maximal biosafety but is more cumbersome, as it involves the transfection of four different plasmids in the producer cells. Example of a 3rd generation packaging combo: pMDLg/pRRE + pRSV-Rev + pMD2.G. Please note that most Trono lab lentivectors contain a wt 5'LTR and can be packaged only using the 2nd generation packaging system (as the wt 5'LTR requires TAT for activation). If you wish to use the 3rd generation packaging system, you need to have a lentivector with a chimeric 5'LTR (e.g. CCL-, RRL-, etc) in which the HIV promoter is replaced with CMV or RSV, thus making it TAT-independent. The lentivectors carrying the chimeric 5'LTR can be packaged into either a 2nd or 3rd generation packaging system. Please visit the Trono lab http://tronolab.epfl.ch for cloning strategies, protocols, publications, and more. See LentiWeb http://www.lentiweb.com for discussions on cloning strategies and protocols. Please note that the ClaI site in this plasmid is blocked by Dam

methylation. Do not use this enzyme for diagnostic digests.

Plasmid Name: pMDLg/pRRE

Record Creation Time: 20220422T221641+0000

Record Last Update: 20220728T080050+0000

Ratings and Alerts

No rating or validation information has been found for pMDLg/pRRE.

No alerts have been found for pMDLg/pRRE.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 307 mentions in open access literature.

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

Lee J, et al. (2025) Therapeutic potential of anti-ErbB3 chimeric antigen receptor natural killer cells against breast cancer. Cancer immunology, immunotherapy : CII, 74(2), 73.

Wang X, et al. (2025) Identification of a broad-inhibition influenza neuraminidase antibody from pre-existing memory B cells. Cell host & microbe, 33(1), 151.

Matusova Z, et al. (2025) Aberrant neurodevelopment in human iPS cell-derived models of Alexander disease. Glia, 73(1), 57.

Ullrich V, et al. (2024) KDM5B predicts temozolomide-resistant subclones in glioblastoma. iScience, 27(1), 108596.

Guo D, et al. (2024) Prickle1-driven basement membrane deposition of the iPSC-derived embryoid bodies is separable from the establishment of apicobasal polarity. Cell proliferation, 57(6), e13595.

Hees JT, et al. (2024) Insulin signalling regulates Pink1 mRNA localization via modulation of AMPK activity to support PINK1 function in neurons. Nature metabolism, 6(3), 514.

van de Kooij B, et al. (2024) EXO1 protects BRCA1-deficient cells against toxic DNA lesions. Molecular cell, 84(4), 659.

Lei W, et al. (2024) Safety and feasibility of anti-CD19 CAR T cells expressing inducible IL-7

and CCL19 in patients with relapsed or refractory large B-cell lymphoma. Cell discovery, 10(1), 5.

Manzo SG, et al. (2024) Chromatin protein complexes involved in gene repression in lamina-associated domains. The EMBO journal, 43(21), 5260.

Kostyanovskaya E, et al. (2024) Convergence of autism proteins at the cilium. bioRxiv : the preprint server for biology.

Tosi G, et al. (2024) Cancer cell stiffening via CoQ10 and UBIAD1 regulates ECM signaling and ferroptosis in breast cancer. Nature communications, 15(1), 8214.

Hori A, et al. (2024) MHC class I-dressing is mediated via phosphatidylserine recognition and is enhanced by polyI:C. iScience, 27(5), 109704.

Khamaikawin W, et al. (2024) CRISPR/Cas9 genome editing of CCR5 combined with C46 HIV-1 fusion inhibitor for cellular resistant to R5 and X4 tropic HIV-1. Scientific reports, 14(1), 10852.

Zhou W, et al. (2024) Stem-like progenitor and terminally differentiated TFH-like CD4+ T cell exhaustion in the tumor microenvironment. Cell reports, 43(2), 113797.

Bao K, et al. (2024) A di-acetyl-decorated chromatin signature couples liquid condensation to suppress DNA end synapsis. Molecular cell.

Flores Cortes E, et al. (2024) Histone H2A variant H2A.B is enriched in transcriptionally active and replicating HSV-1 lytic chromatin. Journal of virology, 98(4), e0201523.

Lertsumitkul L, et al. (2024) EphA3-targeted chimeric antigen receptor T cells are effective in glioma and generate curative memory T cell responses. Journal for immunotherapy of cancer, 12(8).

Romero-Pérez I, et al. (2024) Peptidylarginine deiminase 3 modulates response to neratinib in HER2 positive breast cancer. Oncogenesis, 13(1), 30.

Evans MM, et al. (2024) Evaluation of DNA minicircles for delivery of adenine and cytosine base editors using activatable gene on "GO" reporter imaging systems. Molecular therapy. Nucleic acids, 35(3), 102248.

Vaparanta K, et al. (2024) De Novo Multi-Omics Pathway Analysis Designed for Prior Data Independent Inference of Cell Signaling Pathways. Molecular & cellular proteomics : MCP, 23(7), 100780.