Resource Summary Report

Generated by NIF on Aug 28, 2026

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, 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. 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: 20260815T080345+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 1241 mentions in open access literature.

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

Parkinson C, et al. (2026) A dose-dependent switch in translation capacity controls the transcription factor response to H2O2 stress. bioRxiv : the preprint server for biology.

Kou JH, et al. (2026) The MAFG-AS1/G6PD axis reduces platinum sensitivity in colorectal cancer through pentose phosphate pathway activation. Journal of translational medicine, 24(1).

Moon J, et al. (2026) In Silico Prediction of EZHIP Post-Translational Modification Sites and Small-Molecule High-Throughput Screening for Quantitative EZHIP Modulation. Brain tumor research and treatment, 14(2), 91.

Verzier LH, et al. (2026) Cas9-expressing HC-04 hepatocytes facilitate CRISPR-based analysis of Plasmodium falciparum sporozoite-host interactions. PLoS genetics, 22(5), e1012137.

Sabol AL, et al. (2026) Anti-CRISPR-mediated continuous directed evolution of CRISPR-Cas9 in human cells. Proceedings of the National Academy of Sciences of the United States of America, 123(22), e2536003123.

English J, et al. (2026) Distinct synaptic mechanisms underlie NRXN1 variant and disorder background-dependent phenotypes in iPSC-derived neurons. Cell reports, 45(4), 117115.

Balachandran M, et al. (2026) Development and characterization of chimeric antigen receptor macrophages for amyloid clearance. Frontiers in immunology, 17, 1783851.

Coleman P, et al. (2026) ReDisulphID: A discovery platform for thiol redox sensors identifies a druggable site regulating p53 activation. Redox biology, 94, 104196.

Lewis AC, et al. (2026) Inhibition of heme biosynthesis triggers cuproptosis in acute myeloid leukemia. Cell, 189(1), 215.

Kang M, et al. (2026) Pertuzumab Enhances the Antitumor Activity of T-DXd in HER2-Positive Gastric Cancer Cells. Molecular cancer therapeutics, 25(5), 814.

Nagao K, et al. (2026) CHARIOT-AAV: Conjugation of diverse vectors to adeno-associated viruses for delivery of large genes. bioRxiv : the preprint server for biology.

Teo HK, et al. (2026) Healthy donor T cell receptors expand functional neoantigen recognition beyond patient vaccination. Science advances, 12(16), eadz1156.

Searle J, et al. (2026) The E3 ubiquitin ligase HUWE1 is required for KRAS-induced lung cancer. Cell death & disease, 17(1).

Huang Y, et al. (2026) Mechanosensation promotes broad-spectrum antiviral defense through membrane remodeling. Cell chemical biology, 33(3), 307.

Boulton-McDonald R, et al. (2026) mtDNA-Depleted Mitochondria Form Sites of Contact with the Nucleus and Alter the Cellular Epigenome. Contact (Thousand Oaks (Ventura County, Calif.)), 9, 25152564261428840.

Lukasik K, et al. (2026) TRIM9 switches the morphological phenotype of melanoma cells. bioRxiv : the preprint server for biology.

Yao LL, et al. (2026) Cortical astrocytic neogenin, a key protein switching HIF1/2??-VEGFa-induced angiogenesis to MEGF10-driven phagocytosis. Cell reports, 45(3), 117071.

Angiolillo S, et al. (2026) Early Reprogramming Intermediates Enable Direct Neuronal Conversion Via NGN2. Journal of molecular neuroscience : MN, 76(1), 20.

Maeda M, et al. (2026) Detecting the Activation of Endogenous Small GTPases via Fluorescent Signals Utilizing a Split mNeonGreen: Small GTPase ActIvitY ANalyzing (SAIYAN) System. Bio-protocol, 16(1), e5557.

Jagannathan NS, et al. (2026) Dynamic estimation of metabolic state during CAR T cell production. Cell reports methods, 6(2), 101303.