

Resource Summary Report

Generated by [NIF](#) on Aug 27, 2026

pLKO.1 - TRC cloning vector

RRID:Addgene_10878

Type: Plasmid

Proper Citation

RRID:Addgene_10878

Plasmid Information

URL: <http://www.addgene.org/10878>

Proper Citation: RRID:Addgene_10878

Insert Name: stuffer

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:16564017](#)

Vector Backbone Description: Backbone Size:7032; Vector Backbone:pLKO.1; Vector Types:Mammalian Expression, Lentiviral, RNAi; Bacterial Resistance:Ampicillin

Comments: This is the recommended vector for cloning and expressing new shRNA sequences. This plasmid is being used by The RNAi Consortium to produce their shRNA library http://www.broad.mit.edu/genome_bio/trc/ The 1.9kb stuffer can be released with AgeI and EcoRI and replaced with your shRNA sequence of choice. The link to the author's map shows the key features of this vector before the 1.9kb stuffer was cloned in. The link to the sequence shows the entire sequence with the stuffer sequence in capital letters. Also, see Addgene's pLKO.1 protocol <http://www.addgene.org/plko> on how to use the pLKO.1 vector. Plasmid grows more slowly than standard plasmids.

Plasmid Name: pLKO.1 - TRC cloning vector

Record Creation Time: 20220422T221528+0000

Record Last Update: 20260815T080123+0000

Ratings and Alerts

No rating or validation information has been found for pLKO.1 - TRC cloning vector.

No alerts have been found for pLKO.1 - TRC cloning vector.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 904 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Wang J, et al. (2026) Systematic annotation of orphan RNAs reveals blood-accessible molecular barcodes of cancer identity and cancer-emergent oncogenic drivers. *Cell reports. Medicine*, 7(2), 102577.

Yan X, et al. (2026) Activation of T Cell-Intrinsic p53 by Acetylation Elicits Antitumor Immunity to Boost Cancer Immunotherapy. *Cancer discovery*, 16(1), 155.

Liu Q, et al. (2026) Malic enzyme 2 suppresses PINK1-Parkin-mediated mitophagy by stabilizing ATAD3A via competitive interaction with TRIM25. *Cell death & disease*, 17(1).

Xu S, et al. (2026) Dual function of DOT1L suppresses tumor cell-intrinsic immunogenicity in hepatocellular carcinoma. *Oncogene*, 45(16), 1484.

Ye Y, et al. (2026) DCPS modulates TDP-43-linked neurodegeneration through P-body-mediated RNA decay. *Neuron*, 114(11), 1970.

Zhou Y, et al. (2026) CXCL16-driven CD4+ T cells orchestrate immunosurveillance against MHC-I-deficient hepatocellular tumors. *Journal for immunotherapy of cancer*, 14(5).

Zhang Y, et al. (2026) A conserved hormonal signalling-H2A.Z axis rapidly reorganizes 3D chromatin interactions in adipocyte thermogenesis. *Nature metabolism*, 8(5), 1086.

Yu Y, et al. (2026) MUC16 promotes endometrial cancer progression and modulates sensitivity to lapatinib through the ESR1/PI3K/AKT axis. *Translational oncology*, 68, 102774.

Heymann CJF, et al. (2026) Integrated in vitro and multi-cohort cross-omics analysis of HTLV-1-associated lung pathology reveals a RelA-dependent mechanism for monocyte recruitment and differentiation. *Molecular medicine (Cambridge, Mass.)*, 32(1).

Hu X, et al. (2026) Identification of the mitochondria-related gene IRF7 shared by physical exercise and Parkinson's disease and exploration of its potential molecular mechanisms. *PeerJ*, 14, e20994.

Hanson HM, et al. (2026) Human Immunodeficiency Virus Type 2 Vpx-mediated Degradation of TASOR Activates Innate Immune Sensing of Nucleic Acids in Infected Cells. *Journal of molecular biology*, 438(19), 169879.

Yoshida K, et al. (2026) DHODH regulates trophoblast fusion via IFITM-reduced plasma membrane fluidity: Implications for hypertensive disorders of pregnancy. *iScience*, 29(6),

116163.

Abou Alaiwi S, et al. (2026) Generation of a comprehensive epigenomic atlas in clear cell renal cell carcinoma informs kidney cancer progression and heritability. *Cell reports*, 45(2), 116968.

Liu H, et al. (2026) C9orf72 hexanucleotide repeat RNA drives transcriptional dysregulation through genome-wide DNA:RNA hybrid G-quadruplexes. *Neuron*, 114(6), 1045.

Yue W, et al. (2026) A neuron subtype-specific role of MEK-ERK signaling in axon survival via transcriptional regulation of *Nmnat2*. *Cell reports*, 45(2), 116931.

Kolodziejczak AS, et al. (2026) Preclinical drug screen identifies WEE1 inhibitor and vinca alkaloid as a combination treatment concept for Li-Fraumeni syndrome medulloblastoma. *iScience*, 29(2), 114564.

Khan F, et al. (2026) Microglial TBK1 Signaling Promotes Breast Cancer Brain Metastasis. *Cancer research*, 86(1), 12.

Li G, et al. (2026) Mitochondrial VHL rewires cell metabolism in hypoxia. *Cell metabolism*, 38(1), 174.

Sun M, et al. (2026) ER-derived caveolin-coated vesicles transport newly synthesized cholesterol to the plasma membrane. *The Journal of cell biology*, 225(6).

Lu LF, et al. (2026) Male-biased Cyp17a2 orchestrates antiviral sexual dimorphism in fish via STING stabilization and viral protein degradation. *eLife*, 14.