Resource Summary Report

Generated by dkNET on Jul 30, 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: 20260725T073443+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 851 mentions in open access literature.

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

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.

Kral AJ, et al. (2026) Splice-switching ASOs targeting the AURKA 5' UTR collapse an SRSF1-AURKA-MYC oncogenic circuit in pancreatic cancer. Molecular cell, 86(1), 60.

Ge W, et al. (2026) Human organoid tumor transplantation identifies functional glioblastoma-microenvironment communication mediated by PTPRZ1. Cell reports, 45(1), 116848.

Fu Z, et al. (2026) Integrative proteogenomic analysis provides molecular insights and clinical significance in gallbladder cancer. Cancer cell.

Long M, et al. (2025) DIRAS1 Drives Oxaliplatin Resistance in Colorectal Cancer via PHB1-Mediated Mitochondrial Homeostasis. Biology, 14(7).

Lan Y, et al. (2025) Synonymous mutations promote tumorigenesis by disrupting m6A-dependent mRNA metabolism. Cell, 188(7), 1828.

You E, et al. (2025) LINE-1 ORF1p Mimics Viral Innate Immune Evasion Mechanisms in Pancreatic Ductal Adenocarcinoma. Cancer discovery, 15(5), 1063.

Yang Y, et al. (2025) Androgen receptor-regulated lncRNA PRCAT71 promotes AR signaling through the interaction with KHSRP in prostate cancer. Science advances, 11(15), eadk6989.

Zhang C, et al. (2025) PLK2 disrupts autophagic flux to promote SNCA/?-synuclein pathology. Autophagy, 21(8), 1623.

Chen H, et al. (2025) p53-dependent chromatin relaxation is required for DNA double-strand break repair. Acta biochimica et biophysica Sinica, 57(5), 701.

Miao W, et al. (2025) DDX50 cooperates with STAU1 to effect stabilization of pro-differentiation RNAs. Cell reports, 44(1), 115174.

Zhang Z, et al. (2025) Inhibition of KLF5 promotes ferroptosis via the ZEB1/HMOX1 axis to enhance sensitivity to oxaliplatin in cancer cells. Cell death & disease, 16(1), 28.

Luo T, et al. (2025) Strain-Divergent m6A Landscapes Modulate Nipah Virus Replication and METTL3 Inhibition Attenuates Virulence. Viruses, 17(6).

Chalmers SB, et al. (2025) Remodeling of calcium signaling and store operated calcium entry as a consequence of human neural progenitor cell differentiation. Scientific reports, 15(1), 38867.

Keum S, et al. (2025) Targeting dual-specificity phosphatase 23 to overcome chemoresistance and stem cell-like behavior in non-small cell lung cancer cells. Scientific reports, 15(1), 40770.

Liu J, et al. (2025) PELI2 inhibits colorectal cancer development through MAPK signaling pathway. Molecular medicine (Cambridge, Mass.), 31(1), 235.

Zhou M, et al. (2025) Targeting COL5A1 enhances anoikis thus attenuating malignancy of glioblastoma via inhibiting the Wnt/?-catenin signaling pathway. Journal of neuro-oncology, 174(1), 97.

Luo X, et al. (2025) IGF2BP3 recruits NUDT21 to regulate SPTBN1 alternative polyadenylation and drive ovarian cancer progression. Communications biology, 8(1), 680.

Ye Y, et al. (2025) YWHAE affects proliferation, migration and apoptosis of colorectal cancer by regulating extracellular vesicles secretion and Wnt/?-catenin signaling pathway. Translational cancer research, 14(4), 2260.