

Resource Summary Report

Generated by [RRID](#) on Aug 25, 2026

pLOX-TERT-iresTK

RRID:Addgene_12245

Type: Plasmid

Proper Citation

RRID:Addgene_12245

Plasmid Information

URL: <http://www.addgene.org/12245>

Proper Citation: RRID:Addgene_12245

Insert Name: TERT, HSV1-TK

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:11020357](#)

Vector Backbone Description: Backbone Size:13115; Vector Backbone:pHR'; Vector Types:Mammalian Expression, Lentiviral, Cre/Lox; Bacterial Resistance:Ampicillin

Comments: CMV promoter is upstream of the bicistronic coding cassette with hTert and HSV1-TK. During reverse transcription U3 region of the 3'LTR, with LoxP, is duplicated; LoxP sites end up flanking the genome of the integrated provirus. Upon expression of Cre, provirus is excised. Please visit the Trono lab <http://tronolab.epfl.ch> for cloning strategies, protocols, publications, and more.

Plasmid Name: pLOX-TERT-iresTK

Relevant Mutation: LoxP in 3' LTR.

Record Creation Time: 20220422T221640+0000

Record Last Update: 20260815T080344+0000

Ratings and Alerts

No rating or validation information has been found for pLOX-TERT-iresTK.

No alerts have been found for pLOX-TERT-iresTK.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 29 mentions in open access literature.

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

Hoshino H, et al. (2025) Establishment of a human ovarian endometrioid carcinoma cell line by constitutive expression of cyclin-dependent kinase 4, cyclin D1 and telomerase reverse transcriptase. Human cell, 38(2), 47.

Nieto-Romero V, et al. (2024) Restored glyoxylate metabolism after AGXT gene correction and direct reprogramming of primary hyperoxaluria type 1 fibroblasts. iScience, 27(4), 109530.

Freitas GP, et al. (2021) Mesenchymal stem cells overexpressing BMP-9 by CRISPR-Cas9 present high in vitro osteogenic potential and enhance in vivo bone formation. Gene therapy, 28(12), 748.

Lopez-Muneta L, et al. (2021) Generation of NKX2.5GFP Reporter Human iPSCs and Differentiation Into Functional Cardiac Fibroblasts. Frontiers in cell and developmental biology, 9, 797927.

Oliver CR, et al. (2020) Quantifying the Brain Metastatic Tumor Micro-Environment using an Organ-On-A Chip 3D Model, Machine Learning, and Confocal Tomography. Journal of visualized experiments : JoVE(162).

Awad A, et al. (2020) Full length RTEL1 is required for the elongation of the single-stranded telomeric overhang by telomerase. Nucleic acids research, 48(13), 7239.

Giacalone JC, et al. (2019) Generation of an immortalized human choroid endothelial cell line (iChEC-1) using an endothelial cell specific promoter. Microvascular research, 123, 50.

Oliver CR, et al. (2019) A platform for artificial intelligence based identification of the extravasation potential of cancer cells into the brain metastatic niche. Lab on a chip, 19(7), 1162.

Toubiana S, et al. (2019) Persistent epigenetic memory impedes rescue of the telomeric phenotype in human ICF iPSCs following DNMT3B correction. eLife, 8.

Best B, et al. (2018) VEGF/PKD-1 signaling mediates arteriogenic gene expression and angiogenic responses in reversible human microvascular endothelial cells with extended lifespan. Molecular and cellular biochemistry, 446(1-2), 199.

Xia JB, et al. (2017) Gene delivery of hypoxia-inducible VEGF targeting collagen effectively improves cardiac function after myocardial infarction. Scientific reports, 7(1), 13273.

Graham MK, et al. (2017) Low p16INK4a Expression in Early Passage Human Prostate Basal Epithelial Cells Enables Immortalization by Telomerase Expression Alone. *The Prostate*, 77(4), 374.

Hanaford AR, et al. (2016) DiSCoVERing Innovative Therapies for Rare Tumors: Combining Genetically Accurate Disease Models with In Silico Analysis to Identify Novel Therapeutic Targets. *Clinical cancer research : an official journal of the American Association for Cancer Research*, 22(15), 3903.

Mrazek AA, et al. (2015) Apigenin inhibits pancreatic stellate cell activity in pancreatitis. *The Journal of surgical research*, 196(1), 8.

Qi XF, et al. (2015) FoxO3a suppresses the senescence of cardiac microvascular endothelial cells by regulating the ROS-mediated cell cycle. *Journal of molecular and cellular cardiology*, 81, 114.

Choi W, et al. (2015) Efficient PRNP deletion in bovine genome using gene-editing technologies in bovine cells. *Prion*, 9(4), 278.

Lawrenson K, et al. (2014) Src as a novel therapeutic target for endometriosis. *Gynecologic oncology*, 135(1), 100.

Ochiai H, et al. (2014) TALEN-mediated single-base-pair editing identification of an intergenic mutation upstream of BUB1B as causative of PCS (MVA) syndrome. *Proceedings of the National Academy of Sciences of the United States of America*, 111(4), 1461.

Ochiai H, et al. (2014) Stochastic promoter activation affects Nanog expression variability in mouse embryonic stem cells. *Scientific reports*, 4, 7125.

Moon J, et al. (2014) Production of CMAH Knockout Preimplantation Embryos Derived From Immortalized Porcine Cells Via TALE Nucleases. *Molecular therapy. Nucleic acids*, 3(5), e166.