

Resource Summary Report

Generated by [NIF](#) on Jul 29, 2026

pPGK-Cre-bpA

RRID:Addgene_11543

Type: Plasmid

Proper Citation

RRID:Addgene_11543

Plasmid Information

URL: <http://www.addgene.org/11543>

Proper Citation: RRID:Addgene_11543

Insert Name: Phosphoglycerate kinase 1 promoter

Organism: bacteriophage P1

Bacterial Resistance: Ampicillin

Vector Backbone Description: Backbone Marker:Stratagene; Backbone Size:2906; Vector Backbone:XhopKS; Vector Types:Mammalian Expression, Cre/Lox; Bacterial Resistance:Ampicillin

Comments: Full Gene Name: PGK-Cre-bpA: Phosphoglycerate kinase I promoter (PGK), the bacteriophage P1 recombinase Cre with a SV40 large T antigen nuclear localization signal (NLS-Cre), bovine growth hormone polyadenylation site (bpA). Use to express the Cre recombinase in mammalian cells. The vector backbone is a variant of pBluescriptKS- (Stratagene), in which the XbaI site was converted to an XhoI site (provided by Paul Hasty) (Soriano P., Cell 1997). The plasmid was generated by Kurt Fellenberg. He cloned a NLS-Cre sequence, as published by Hua Gu (Gu H, Zou YR, Rajewsky K. 1993. Independent control of immunoglobulin switch recombination at individual switch regions evidenced through Cre-loxP-mediated gene targeting. Cell. 73:1155-1164) and cloned it into the pPGK-neo-bpA (Soriano P, Montgomery C, Geske R, Bradley A. 1991 Targeted disruption of the c-src proto-oncogene leads to osteopetrosis in mice. Cell. Feb 22;64(4):693-702.), replacing the neomycin resistance gene (neo) with the NLS-Cre. NOTE: There are some discrepancies between the Addgene quality control sequence and the sequence provided by the depositing lab, but these differences should not affect plasmid function.

Plasmid Name: pPGK-Cre-bpA

Record Creation Time: 20220422T221604+0000

Ratings and Alerts

No rating or validation information has been found for pPGK-Cre-bpA.

No alerts have been found for pPGK-Cre-bpA.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 20 mentions in open access literature.

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

Hyraht A, et al. (2025) Generation of WT1-tdTomato knock-in cynomolgus monkey embryonic stem cell line, WT1-205 using CRISPR/CAS9-based gene targeting. Stem cell research, 87, 103742.

Marin H, et al. (2024) The nuclear periphery confers repression on H3K9me2-marked genes and transposons to shape cell fate. bioRxiv : the preprint server for biology.

Jiang Y, et al. (2021) A Novel Cre Recombinase-Mediated In Vivo Minicircle (CRIM) DNA Vaccine Platform for Veterinary Application. Methods in molecular biology (Clifton, N.J.), 2197, 3.

Kaczmarek JC, et al. (2021) Systemic delivery of mRNA and DNA to the lung using polymer-lipid nanoparticles. Biomaterials, 275, 120966.

Markaki Y, et al. (2021) Xist nucleates local protein gradients to propagate silencing across the X chromosome. Cell, 184(25), 6174.

Mishra A, et al. (2020) Generation of focal mutations and large genomic deletions in the pancreas using inducible in vivo genome editing. Carcinogenesis, 41(3), 334.

Rai S, et al. (2019) The ATG5-binding and coiled coil domains of ATG16L1 maintain autophagy and tissue homeostasis in mice independently of the WD domain required for LC3-associated phagocytosis. Autophagy, 15(4), 599.

Frank S, et al. (2019) yylncT Defines a Class of Divergently Transcribed lncRNAs and Safeguards the T-mediated Mesodermal Commitment of Human PSCs. Cell stem cell, 24(2), 318.

Brooks J, et al. (2018) Perioperative, Spatiotemporally Coordinated Activation of T and NK Cells Prevents Recurrence of Pancreatic Cancer. Cancer research, 78(2), 475.

Ford MJ, et al. (2018) A Cell/Cilia Cycle Biosensor for Single-Cell Kinetics Reveals Persistence of Cilia after G1/S Transition Is a General Property in Cells and Mice. *Developmental cell*, 47(4), 509.

Dubbury SJ, et al. (2018) CDK12 regulates DNA repair genes by suppressing intronic polyadenylation. *Nature*, 564(7734), 141.

Aoki W, et al. (2018) Cellomics approach for high-throughput functional annotation of *Caenorhabditis elegans* neural network. *Scientific reports*, 8(1), 10380.

Phan QV, et al. (2017) Site-specific chromosomal gene insertion: FLP recombinase versus Cas9 nuclease. *Scientific reports*, 7(1), 17771.

Li L, et al. (2016) Knockin of Cre Gene at Ins2 Locus Reveals No Cre Activity in Mouse Hypothalamic Neurons. *Scientific reports*, 6, 20438.

Gürlevik E, et al. (2016) Administration of Gemcitabine After Pancreatic Tumor Resection in Mice Induces an Antitumor Immune Response Mediated by Natural Killer Cells. *Gastroenterology*, 151(2), 338.

Maresch R, et al. (2016) Multiplexed pancreatic genome engineering and cancer induction by transfection-based CRISPR/Cas9 delivery in mice. *Nature communications*, 7, 10770.

Chang KY, et al. (2014) Light-inducible receptor tyrosine kinases that regulate neurotrophin signalling. *Nature communications*, 5, 4057.

Zhong R, et al. (2014) Bioluminescent imaging of HPV-positive oral tumor growth and its response to image-guided radiotherapy. *Cancer research*, 74(7), 2073.

Gürlevik E, et al. (2013) Adjuvant gemcitabine therapy improves survival in a locally induced, R0-resectable model of metastatic intrahepatic cholangiocarcinoma. *Hepatology (Baltimore, Md.)*, 58(3), 1031.

Sumegi M, et al. (2012) Virus-mediated swapping of zolpidem-insensitive with zolpidem-sensitive GABA(A) receptors in cortical pyramidal cells. *The Journal of physiology*, 590(7), 1517.