

Resource Summary Report

Generated by [RRID](#) on Aug 17, 2026

[pdCas9](#)

RRID:Addgene_46569

Type: Plasmid

Proper Citation

RRID:Addgene_46569

Plasmid Information

URL: <http://www.addgene.org/46569>

Proper Citation: RRID:Addgene_46569

Insert Name: tracrRNA

Organism: S. pyogenes

Bacterial Resistance: Chloramphenicol

Defining Citation: [PMID:23761437](#)

Vector Backbone Description: Vector Backbone:pACYC184; Vector Types:Bacterial Expression, CRISPR; Bacterial Resistance:Chloramphenicol

Plasmid Name: pdCas9

Record Creation Time: 20220422T222240+0000

Record Last Update: 20260815T081533+0000

Ratings and Alerts

No rating or validation information has been found for pdCas9.

No alerts have been found for pdCas9.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 17 mentions in open access literature.

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

Choe D, et al. (2025) Rapid identification of key antibiotic resistance genes in E. coli using high-resolution genome-scale CRISPRi screening. *iScience*, 28(5), 112435.

Choe D, et al. (2025) CRISPRi screening reveals E. coli's anaerobic-like respiratory adaptations to gentamicin: membrane depolarization by CpxR. *mSystems*, 10(7), e0035325.

Polani R, et al. (2025) Cefiderocol Resistance Conferred by Plasmid-Located Ferric Citrate Transport System in KPC-Producing *Klebsiella pneumoniae*. *Emerging infectious diseases*, 31(1), 123.

da Silva RC, et al. (2025) Engineered chromatin readers track damaged chromatin dynamics in live cells and animals. *Nature communications*, 16(1), 10127.

Costigan R, et al. (2022) Development and validation of a CRISPR interference system for gene regulation in *Campylobacter jejuni*. *BMC microbiology*, 22(1), 238.

Łaska-Kiss K, et al. (2021) Lowering DNA binding affinity of SssI DNA methyltransferase does not enhance the specificity of targeted DNA methylation in E. coli. *Scientific reports*, 11(1), 15226.

Kim B, et al. (2020) Regulation of Microbial Metabolic Rates Using CRISPR Interference With Expanded PAM Sequences. *Frontiers in microbiology*, 11, 282.

Szentes S, et al. (2020) I-Block: a simple *Escherichia coli*-based assay for studying sequence-specific DNA binding of proteins. *Nucleic acids research*, 48(5), e28.

Kirtania P, et al. (2019) A single plasmid based CRISPR interference in *Synechocystis* 6803 - A proof of concept. *PloS one*, 14(11), e0225375.

Badri A, et al. (2019) Increased 3'-Phosphoadenosine-5'-phosphosulfate Levels in Engineered *Escherichia coli* Cell Lysate Facilitate the In Vitro Synthesis of Chondroitin Sulfate A. *Biotechnology journal*, 14(9), e1800436.

Ram G, et al. (2018) Conversion of staphylococcal pathogenicity islands to CRISPR-carrying antibacterial agents that cure infections in mice. *Nature biotechnology*, 36(10), 971.

Lipinszki Z, et al. (2018) Enhancing the Translational Capacity of E. coli by Resolving the Codon Bias. *ACS synthetic biology*, 7(11), 2656.

Tastan C, et al. (2018) Tuning of human MAIT cell activation by commensal bacteria species and MR1-dependent T-cell presentation. *Mucosal immunology*, 11(6), 1591.

Nuñez IN, et al. (2017) Artificial Symmetry-Breaking for Morphogenetic Engineering Bacterial Colonies. *ACS synthetic biology*, 6(2), 256.

Jusiak B, et al. (2016) Engineering Synthetic Gene Circuits in Living Cells with CRISPR Technology. Trends in biotechnology, 34(7), 535.

Cress BF, et al. (2016) Rapid generation of CRISPR/dCas9-regulated, orthogonally repressible hybrid T7-lac promoters for modular, tuneable control of metabolic pathway fluxes in Escherichia coli. Nucleic acids research, 44(9), 4472.

Li XT, et al. (2016) tCRISPRi: tunable and reversible, one-step control of gene expression. Scientific reports, 6, 39076.