

Resource Summary Report

Generated by [RRID](#) on Aug 18, 2026

pCRISPR

RRID:Addgene_42875

Type: Plasmid

Proper Citation

RRID:Addgene_42875

Plasmid Information

URL: <http://www.addgene.org/42875>

Proper Citation: RRID:Addgene_42875

Insert Name: CRISPR-BsaI

Bacterial Resistance: Kanamycin

Defining Citation: [PMID:23360965](#)

Vector Backbone Description: Backbone Size:2254; Vector Backbone:pZE21-MCS1; Vector Types:Bacterial Expression, CRISPR, E.coli; Bacterial Resistance:Kanamycin

Comments: This plasmid is also known as pDB129. This plasmid contains a duplicated spacer insertion site (4 BsaI sites instead of 2). Please note that these extra sites are eliminated upon treatment with BsaI, and the depositing lab has used this version extensively without issue. Addgene has found that versions of the plasmid with and without the duplicated spacer are present, both are predicted to perform similarly. The HME63 strain is available from the from the Court Lab:

<http://redrecombineering.ncifcrf.gov/strains.html> For more information on Marraffini Lab CRISPR Plasmids please refer to: <http://www.addgene.org/crispr/marraffini/>

Plasmid Name: pCRISPR

Record Creation Time: 20220422T222221+0000

Record Last Update: 20260815T081458+0000

Ratings and Alerts

No rating or validation information has been found for pCRISPR.

No alerts have been found for pCRISPR.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 31 mentions in open access literature.

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

Butterworth LJ, et al. (2025) Replisomal coupling between the γ -pol III core and the γ -subunit of the clamp loader complex (CLC) are essential for genomic integrity in *Escherichia coli*. *The Journal of biological chemistry*, 301(2), 108177.

Collias D, et al. (2023) Systematically attenuating DNA targeting enables CRISPR-driven editing in bacteria. *Nature communications*, 14(1), 680.

Deng P, et al. (2023) A Polyketide Synthetase Gene Cluster Is Responsible for Antibacterial Activity of *Burkholderia contaminans* MS14. *Phytopathology*, 113(1), 11.

Jenson JM, et al. (2023) Ubiquitin-like conjugation by bacterial cGAS enhances anti-phage defence. *Nature*, 616(7956), 326.

Gong Z, et al. (2023) Molecular mechanism of lipopolysaccharide (LPS) in promoting biomineralization on bacterial surface. *Biochimica et biophysica acta. General subjects*, 1867(3), 130305.

Carmody CM, et al. (2023) Monomeric streptavidin phage display allows efficient immobilization of bacteriophages on magnetic particles for the capture, separation, and detection of bacteria. *Scientific reports*, 13(1), 16207.

Hobbs SJ, et al. (2022) Phage anti-CBASS and anti-Pycsar nucleases subvert bacterial immunity. *Nature*, 605(7910), 522.

Zhang X, et al. (2022) CRISPR-Cas9 Based Bacteriophage Genome Editing. *Microbiology spectrum*, 10(4), e0082022.

Plaska-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.

Behrmann MS, et al. (2021) Targeted chromosomal *Escherichia coli*:dnaB exterior surface residues regulate DNA helicase behavior to maintain genomic stability and organismal fitness. *PLoS genetics*, 17(11), e1009886.

D'Souza R, et al. (2021) Role of AmpG in the resistance to β -lactam agents, including cephalosporins and carbapenems: candidate for a novel antimicrobial target. *Annals of clinical microbiology and antimicrobials*, 20(1), 45.

Ellis NA, et al. (2021) A multiplex CRISPR interference tool for virulence gene interrogation in *Legionella pneumophila*. *Communications biology*, 4(1), 157.

Mathis AD, et al. (2021) A simplified strategy for titrating gene expression reveals new relationships between genotype, environment, and bacterial growth. *Nucleic acids research*, 49(1), e6.

Duong MM, et al. (2020) Phage-based biosensors: in vivo analysis of native T4 phage promoters to enhance reporter enzyme expression. *The Analyst*, 145(19), 6291.

Duong MM, et al. (2020) Optimization of T4 phage engineering via CRISPR/Cas9. *Scientific reports*, 10(1), 18229.

Chen T, et al. (2019) Construction of a bacterial surface display system based on outer membrane protein F. *Microbial cell factories*, 18(1), 70.

Szili P, et al. (2019) Rapid Evolution of Reduced Susceptibility against a Balanced Dual-Targeting Antibiotic through Stepping-Stone Mutations. *Antimicrobial agents and chemotherapy*, 63(9).

Schober AF, et al. (2019) A Two-Enzyme Adaptive Unit within Bacterial Folate Metabolism. *Cell reports*, 27(11), 3359.

Sung LY, et al. (2019) Combining orthogonal CRISPR and CRISPRi systems for genome engineering and metabolic pathway modulation in *Escherichia coli*. *Biotechnology and bioengineering*, 116(5), 1066.

König E, et al. (2018) Multiple Stepwise Gene Knockout Using CRISPR/Cas9 in *Escherichia coli*. *Bio-protocol*, 8(2), e2688.