Resource Summary Report

Generated by RRID on Aug 22, 2026

pgRNA-bacteria

RRID:Addgene_44251
Type: Plasmid

Proper Citation

RRID:Addgene_44251

Plasmid Information

URL: http://www.addgene.org/44251

Proper Citation: RRID:Addgene_44251

Insert Name: guide RNA (bacteria)

Bacterial Resistance: Ampicillin

Defining Citation: PMID:23452860

Vector Backbone Description: Vector Backbone:pUC19; Vector Types:Bacterial Expression, CRISPR; Bacterial Resistance:Ampicillin

Plasmid Name: pgRNA-bacteria

Record Creation Time: 20220422T222229+0000

Record Last Update: 20260815T081513+0000

Ratings and Alerts

No rating or validation information has been found for pgRNA-bacteria.

No alerts have been found for pgRNA-bacteria.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 73 mentions in open access literature.

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

Khan SA, et al. (2026) Development and Optimization of CRISPR/Cas9-Assisted Recombineering in Escherichia albertii. microPublication biology, 2026.

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.

Qiu T, et al. (2025) The Role of L-Sorbose Metabolism in Enhancing Fitness and Virulence in Escherichia coli Under Acidic Conditions. Infection and drug resistance, 18, 3071.

Ebrecht AC, et al. (2025) Use of Whole Cells and Cell-Free Extracts of Catalase-Deficient E. coli for Peroxygenase-Catalyzed Reactions. Biotechnology and bioengineering, 122(6), 1376.

Rodríguez-Alonso P, et al. (2025) Assessing the feasibility of CRISPRa approaches to enhance protein-based biomaterial expression in bacterial systems for more efficient production. Materials today. Bio, 32, 101720.

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.

Lubrano P, et al. (2025) Metabolic mutations reduce antibiotic susceptibility of E. coli by pathway-specific bottlenecks. Molecular systems biology, 21(3), 274.

Wang P, et al. (2024) Combining CRISPR/Cas9 and natural excision for the precise and complete removal of mobile genetic elements in bacteria. Applied and environmental microbiology, 90(4), e0009524.

Yang Y, et al. (2024) Re-engineered guide RNA enables DNA loops and contacts modulating repression in E. coli. Nucleic acids research, 52(15), 9328.

Mayers JR, et al. (2024) A metabolomics pipeline highlights microbial metabolism in bloodstream infections. Cell, 187(15), 4095.

Boob AG, et al. (2024) CRISPR-COPIES: an in silico platform for discovery of neutral integration sites for CRISPR/Cas-facilitated gene integration. Nucleic acids research, 52(6), e30.

Mayers JR, et al. (2023) Identification and targeting of microbial putrescine acetylation in bloodstream infections. bioRxiv : the preprint server for biology.

Luelf UJ, et al. (2023) Effect of chromosomal integration on catalytic performance of a multi-component P450 system in Escherichia coli. Biotechnology and bioengineering, 120(7), 1762.

Zuberi A, et al. (2022) CRISPR Interference (CRISPRi) Mediated Suppression of OmpR Gene in E. coli: An Alternative Approach to Inhibit Biofilm. Current microbiology, 79(3), 78.

Heo YB, et al. (2022) High-Fidelity Cytosine Base Editing in a GC-Rich Corynebacterium glutamicum with Reduced DNA Off-Target Editing Effects. Microbiology spectrum, 10(6), e0376022.

Tsuji A, et al. (2022) Establishment of genetic tools for genomic DNA engineering of Halomonas sp. KM-1, a bacterium with potential for biochemical production. Microbial cell factories, 21(1), 122.

Yao S, et al. (2022) Efficient Suppression of Natural Plasmid-Borne Gene Expression in Carbapenem-Resistant Klebsiella pneumoniae Using a Compact CRISPR Interference System. Antimicrobial agents and chemotherapy, 66(11), e0089022.

Feng S, et al. (2022) MCR-1-dependent lipid remodelling compromises the viability of Gram-negative bacteria. Emerging microbes & infections, 11(1), 1236.

Barber KW, et al. (2022) CasPlay provides a gRNA-barcoded CRISPR-based display platform for antibody repertoire profiling. Cell reports methods, 2(10), 100318.

Ziegler M, et al. (2022) CRISPRi enables fast growth followed by stable aerobic pyruvate formation in Escherichia coli without auxotrophy. Engineering in life sciences, 22(2), 70.