

Resource Summary Report

Generated by [NIF](#) on Sep 3, 2026

[breseq](#)

RRID:SCR_010810

Type: Tool

Proper Citation

breseq (RRID:SCR_010810)

Resource Information

URL: <https://code.google.com/p/breseq/>

Proper Citation: breseq (RRID:SCR_010810)

Description: A computational pipeline for finding mutations relative to a reference sequence in short-read DNA re-sequencing data intended for haploid microbial genomes.

Abbreviations: breseq

Synonyms: breseq - Determine mutations in evolved microbes from next-generation sequencing data

Resource Type: software resource

Keywords: windows, genomics, sequencing, bio.tools

Resource Name: breseq

Resource ID: SCR_010810

Alternate IDs: OMICS_00298, biotools:breseq

Alternate URLs:

<https://barricklab.org/twiki/bin/view/Lab/ToolsBacterialGenomeResequencing>,
<https://bio.tools/breseq>

Record Creation Time: 20220129T080300+0000

Record Last Update: 20260903T235041+0000

Ratings and Alerts

No rating or validation information has been found for breseq.

No alerts have been found for breseq.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 474 mentions in open access literature.

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

Mazny BE, et al. (2026) Evolved formate assimilation in phototrophic *Rhodopseudomonas palustris* indicates the need for a CO₂-concentrating mechanism. *Current biology : CB*, 36(1), 110.

Yoshii Y, et al. (2026) Intermittent antibiotic exposure of *Escherichia coli* biofilms drives resistance in catheter-associated infection models. *NPJ biofilms and microbiomes*, 12(1), 41.

Kanaris O, et al. (2026) Consequences of benzalkonium chloride tolerance for selection dynamics and de novo resistance evolution driven by antibiotics. *npj antimicrobials and resistance*, 4(1), 2.

Thapa M, et al. (2026) Translocation of bacteria from the gut to the brain in mice. *PLoS biology*, 24(3), e3003652.

Royer G, et al. (2026) Piperacillin-tazobactam resistance in *Klebsiella pneumoniae* is often associated with IS26-mediated blaSHV-1 amplification in a widespread *Klebsiella*-adapted plasmid. *Antimicrobial agents and chemotherapy*, 70(5), e0168225.

Wang J, et al. (2026) Time-associated phenotypic changes related to virulence and immune interaction of *Staphylococcus aureus* during relapsing infection within individual hosts. *BMC infectious diseases*, 26(1).

Stuart EC, et al. (2026) Sequential Phage Delivery Can Outperform Cocktails by Delaying Cross-Resistance Evolution. *Viruses*, 18(4).

Kuzio?a M, et al. (2026) Fluoroquinolones as the linchpin of tuberculosis therapy: contrasting efficacy and resistance profiles in *Mycobacterium tuberculosis* versus *Mycobacterium abscessus*. *Frontiers in cellular and infection microbiology*, 16, 1833650.

Ellison TJ, et al. (2026) A WYL transcriptional regulator activates the DNA damage response pathway in *Acinetobacter* species. *Nucleic acids research*, 54(6).

Le Scornet A, et al. (2026) Inactivation of a purine biosynthesis repressor promotes ribosome synthesis to overcome antibiotic stress. *mBio*, 17(5), e0011826.

McLaughlin M, et al. (2026) An N4-like *Caulobacter* phage requires host smooth lipopolysaccharide biosynthesis for infection. *Journal of bacteriology*, 208(3), e0048825.

Royer M, et al. (2026) The mecillinam resistome in *Klebsiella pneumoniae*: how resistance to a one-target β -lactam triggers a diversity of responses. *Antimicrobial agents and chemotherapy*, 70(3), e0120725.

Ramiro-Martínez P, et al. (2026) Plasmid mutation rates scale with copy number. *Proceedings of the National Academy of Sciences of the United States of America*, 123(4), e2526088123.

Carr JF, et al. (2026) Impaired envelope integrity in the absence of SanA is linked to increased lipid II availability and an imbalance of septal peptidoglycan synthesis. *mBio*, 17(6), e0063526.

Lahey BD, et al. (2026) Mucin-derived sugars act as metabolic brakes controlling growth initiation in *Akkermansia muciniphila*. *Gut microbes*, 18(1), 2691334.

Gloag ES, et al. (2026) *Pseudomonas aeruginosa* biofilm-deficient mutants undergo parallel evolution during chronic infection. *Journal of bacteriology*, 208(6), e0052025.

Ets L, et al. (2026) Adaptive evolution of *Pseudomonas putida* in the presence of fluoride exposes novel functions of a benzoate transporter. *Journal of bacteriology*, 208(4), e0047925.

Luong T, et al. (2026) Ecological partitioning enables phage-antibiotic cooperation in a human *Pseudomonas* infection. *Nature communications*, 17(1).

Mezcord V, et al. (2026) Vitamin B12 promotes cefiderocol resistance and small-colony variants in carbapenem-resistant *Acinetobacter baumannii*. *mBio*, 17(2), e0376025.

Pérez-Morales G, et al. (2026) Enhancing the heat tolerance of homolactic *Escherichia coli* through reverse metabolic engineering. *Applied microbiology and biotechnology*, 110(1), 26.