Resource Summary Report

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BacMap: Bacterial Genome Atlas

RRID:SCR_006988
Type: Tool

Proper Citation

BacMap: Bacterial Genome Atlas (RRID:SCR_006988)

Resource Information

URL: http://wishart.biology.ualberta.ca/BacMap

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Description: An interactive visual database containing hundreds of fully labeled, zoomable, and searchable maps of bacterial genomes. It uses a visualization tool (CGView) to generate high-resolution circular genome maps from sequence feature information. Each map includes an interface that allows the image to be expanded and rotated. In the default view, identified genes are drawn to scale and colored according to coding directions. When a region of interest is expanded, gene labels are displayed. Each label is hyperlinked to a custom "gene card" which provides several fields of information concerning the corresponding DNA and protein sequences. Each genome map is searchable via a local BLAST search and a gene name/synonym search. A complete listing of the species and strains in the BacMap database is available on the BacMap homepage. Below each species/strain name is a list of the sequenced chromosomes and plasmids that are available. Some features of BacMap include: * Maps are available for 2023 bacterial chromosomes. * Each map supports zooming and rotation. * Map gene labels are hyperlinked to detailed textual annotations. * Maps can be explored manually, or with the help of BacMap"s built in text search and BLAST search. * A written synopsis of each bacterial species is provided. * Several charts illustrating the proteomic and genomic characteristics of each chromosome are available. * Flat file versions of the BacMap gene annotations, gene sequences and protein sequences can be downloaded. BacMap can be used to: * Obtain basic genome statistics. * Visualize the genomic context of genes. * Search for orthologues and paralogues in a genome of interest. * Search for conserved operon structure. * Look for gene content differences between bacterial species. * Obtain pre-calculated annotations for bacterial genes of interest.

Abbreviations: BacMap

Synonyms: BacMap: An Interactive Atlas for Exploring Bacterial Genomes, BacMap genome atlas

Resource Type: database, atlas, data or information resource

Defining Citation: PMID:15608206

Keywords: gene, gene annotation, gene sequence, genome, bacteria, chromosome, protein sequence

Funding: Alberta Science Research Authority ;
Western Economic Diversification ;
Genome Canada ;
Genome Prairie ;
Western Economic Diversification Canada

Availability: Free, Acknowledgement requested

Resource Name: BacMap: Bacterial Genome Atlas

Resource ID: SCR_006988

Alternate IDs: nif-0000-02591

Record Creation Time: 20220129T080239+0000

Record Last Update: 20250417T065259+0000

Ratings and Alerts

No rating or validation information has been found for BacMap: Bacterial Genome Atlas.

No alerts have been found for BacMap: Bacterial Genome Atlas.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 4 mentions in open access literature.

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

Rocha-Martin J, et al. (2019) Functional Characterization and Structural Analysis of NADH Oxidase Mutants from Thermus thermophilus HB27: Role of Residues 166, 174, and 194 in

the Catalytic Properties and Thermostability. Microorganisms, 7(11).

Shaaban H, et al. (2018) The Microbe Directory: An annotated, searchable inventory of microbes' characteristics. Gates open research, 2, 3.

Vega-Cabrera LA, et al. (2017) Analysis of Spo0M function in Bacillus subtilis. PloS one, 12(2), e0172737.

Galperin MY, et al. (2005) The Molecular Biology Database Collection: 2005 update. Nucleic acids research, 33(Database issue), D5.