# **Resource Summary Report**

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# BACTIBASE

RRID:SCR\_006694 Type: Tool

**Proper Citation** 

BACTIBASE (RRID:SCR\_006694)

#### **Resource Information**

URL: http://bactibase.pfba-lab-tun.org/main.php

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**Description:** Data repository of bacteriocin natural antimicrobial peptides and includes data collected from published literature as well as high-throughput datasets. The database provides a manually curated annotation of bacteriocin sequences. New bacteriocin submissions are welcome. Various tools have been incorporated for bacteriocin analysis, such as homology search, multiple sequence alignments, Hidden Markov Models, molecular modelling and retrieval through our taxonomy Browser. BACTIBASE should be a useful tool in food preservation or food safety applications and could have implications for the development of new drugs for medical use. BACTIBASE contains calculated or predicted physicochemical properties of 218 bacteriocins produced by both Gram-positive (194) and Gram-negative bacteria (19). They also note the presence of three bacteriocins from the Archaea domain. The database now comprises 31 genera (2009).

Abbreviations: BACTIBASE

Synonyms: BACTIBASE - database dedicated to bacteriocins

**Resource Type:** data or information resource, storage service resource, database, service resource, data repository

Defining Citation: PMID:20105292, PMID:17941971

Keywords: genetics, bacteriocin, chemistry, peptide sequence, data analysis service

Funding: Ministry of Higher Education Scientific Research - Tunisia

Availability: You shall not reproduce, Publish, Upload, Post, Transmit, Adapt, Modify or

otherwise display, Distribute or exploit in any way, This Web Site or the Contents or any part thereof without the prior written consent of BACTIBASE Administrators or the third party owner or provider of the Contents., The community can contribute to this resource

**Resource Name: BACTIBASE** 

Resource ID: SCR\_006694

Alternate IDs: nlx\_54530

Old URLs: http://bactibase.pfba-lab.org

Record Creation Time: 20220129T080237+0000

Record Last Update: 20250425T055546+0000

## **Ratings and Alerts**

No rating or validation information has been found for BACTIBASE.

No alerts have been found for BACTIBASE.

#### Data and Source Information

Source: SciCrunch Registry

## **Usage and Citation Metrics**

We found 32 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Choi DG, et al. (2024) Comparative pangenome analysis of Enterococcus faecium and Enterococcus lactis provides new insights into the adaptive evolution by horizontal gene acquisitions. BMC genomics, 25(1), 28.

Guo L, et al. (2024) Rombocin, a Short Stable Natural Nisin Variant, Displays Selective Antimicrobial Activity against Listeria monocytogenes and Employs a Dual Mode of Action to Kill Target Bacterial Strains. ACS synthetic biology, 13(1), 370.

Liu S, et al. (2024) Production of a Bacteriocin Like Protein PEG 446 from Clostridium tyrobutyricum NRRL B-67062. Probiotics and antimicrobial proteins, 16(4), 1411.

Zhao X, et al. (2024) Klebicin E, a pore-forming bacteriocin of Klebsiella pneumoniae, exploits the porin OmpC and the Ton system for translocation. The Journal of biological chemistry, 300(3), 105694.

Teso-Pérez C, et al. (2023) Circular and L50-like leaderless enterocins share a common ABC-transporter immunity gene. BMC genomics, 24(1), 639.

Khánh CM, et al. (2023) Heterologously expressed SacP23, a novel bacteriocin from Paenibacillus polymyxa #23, is active against methicillin resistant Staphylococcus aureus. Royal Society open science, 10(12), 231119.

Aziz T, et al. (2023) Genome Investigation and Functional Annotation of Lactiplantibacillus plantarum YW11 Revealing Streptin and Ruminococcin-A as Potent Nutritive Bacteriocins against Gut Symbiotic Pathogens. Molecules (Basel, Switzerland), 28(2).

Aldarhami A, et al. (2023) Identification of novel bacteriocin against Staphylococcus and Bacillus species. International journal of health sciences, 17(5), 15.

Darvishi N, et al. (2021) Genomic and proteomic comparisons of bacteriocins in probiotic species Lactobacillus and Bifidobacterium and inhibitory ability of Escherichia coli MG 1655. Biotechnology reports (Amsterdam, Netherlands), 31, e00654.

Barbosa J, et al. (2021) Characterization of a Lactiplantibacillus plantarum R23 Isolated from Arugula by Whole-Genome Sequencing and Its Bacteriocin Production Ability. International journal of environmental research and public health, 18(11).

Onime LA, et al. (2021) The rumen eukaryotome is a source of novel antimicrobial peptides with therapeutic potential. BMC microbiology, 21(1), 105.

Burdukiewicz M, et al. (2020) Proteomic Screening for Prediction and Design of Antimicrobial Peptides with AmpGram. International journal of molecular sciences, 21(12).

Garrido C, et al. (2020) Evidence Supporting an Antimicrobial Origin of Targeting Peptides to Endosymbiotic Organelles. Cells, 9(8).

Lebedeva J, et al. (2020) Genome Mining and Characterization of Biosynthetic Gene Clusters in Two Cave Strains of Paenibacillus sp. Frontiers in microbiology, 11, 612483.

El Jeni R, et al. (2020) High-quality genome sequence assembly of R.A73 Enterococcus faecium isolated from freshwater fish mucus. BMC microbiology, 20(1), 322.

Lao J, et al. (2020) Abundance, Diversity and Role of ICEs and IMEs in the Adaptation of Streptococcus salivarius to the Environment. Genes, 11(9).

Jhong JH, et al. (2019) dbAMP: an integrated resource for exploring antimicrobial peptides with functional activities and physicochemical properties on transcriptome and proteome data. Nucleic acids research, 47(D1), D285.

Choyam S, et al. (2019) Ocins database: a database of bug-busters from Bifidobacterium, Lactobacillus, and Enterococcus. Access microbiology, 1(4), e000034.

Cameron A, et al. (2019) Bacteriocin Occurrence and Activity in Escherichia coli Isolated

from Bovines and Wastewater. Toxins, 11(8).

Aruleba RT, et al. (2018) Structural Studies of Predicted Ligand Binding Sites and Molecular Docking Analysis of Slc2a4 as a Therapeutic Target for the Treatment of Cancer. International journal of molecular sciences, 19(2).