

Resource Summary Report

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PHAge Search Tool

RRID:SCR_005184

Type: Tool

Proper Citation

PHAge Search Tool (RRID:SCR_005184)

Resource Information

URL: <http://phast.wishartlab.com/>

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Description: A web server designed to rapidly and accurately identify, annotate and graphically display prophage sequences within bacterial genomes or plasmids. It accepts either raw DNA sequence data or partially annotated GenBank formatted data and rapidly performs a number of database comparisons as well as phage cornerstone feature identification steps to locate, annotate and display prophage sequences and prophage features. Relative to other prophage identification tools, PHAST is up to 40 times faster and up to 15% more sensitive. It is also able to process and annotate both raw DNA sequence data and Genbank files, provide richly annotated tables on prophage features and prophage quality and distinguish between intact and incomplete prophage. PHAST also generates downloadable, high quality, interactive graphics that display all identified prophage components in both circular and linear genomic views. Databases available for download include Virus DB, Prophage and virus DB, Bacteria DB, and PHAST result DB. Pre-calculated genomes for viewing are also available.

Abbreviations: PHAST

Synonyms: PHAST - PHAge Search Tool

Resource Type: production service resource, service resource, data analysis service, data or information resource, analysis service resource, data set

Defining Citation: [PMID:21672955](#)

Keywords: prophage sequence, genome, prophage, sequence, bacterial genome, plasmid, dna sequence, graph, phage, annotate, virus, nucleotide sequence, fasta, annotated genome, genbank, bio.tools, FASEB list

Availability: Acknowledgement requested

Resource Name: PHAge Search Tool

Resource ID: SCR_005184

Alternate IDs: biotools:phast, OMICS_00180

Alternate URLs: <https://bio.tools/phast>

Record Creation Time: 20220129T080228+0000

Record Last Update: 20260821T042634+0000

Ratings and Alerts

No rating or validation information has been found for PHAge Search Tool.

No alerts have been found for PHAge Search Tool.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 243 mentions in open access literature.

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

Mangieri N, et al. (2026) Characterization of broad-host-range bacteriophages targeting multidrug-resistant *E. coli* and *Shigella* spp.: in vitro potential. *BMC microbiology*, 26(1).

Li Y, et al. (2026) Genomic characterization of *Actinobacillus pleuropneumoniae* serovars 5, 8, and 15 strains from diseased pigs in eastern Chinese provinces. *Virulence*, 17(1), 2620200.

Wang J, et al. (2025) Characterization and whole-genome sequencing data of a highly pathogenic group B *Streptococcus* strain related to stillbirth. *Data in brief*, 60, 111658.

Zhu L, et al. (2025) Genomic Investigation of a *Bacillus subtilis* Strain Sourced from Commercially Available Milk Powder in China Reveals Potential Risk Factors. *Infection and drug resistance*, 18, 4311.

Yang H, et al. (2025) Genomic alterations in *Bacteroides fragilis* favor adaptation in colorectal cancer microenvironment. *BMC genomics*, 26(1), 269.

Wu L, et al. (2025) *Streptococcus suis* Serotype 14: A Nonnegligible Zoonotic Population. *Transboundary and emerging diseases*, 2025, 5779652.

Wright SN, et al. (2025) State of the interactomes: an evaluation of molecular networks for generating biological insights. *Molecular systems biology*, 21(1), 1.

Christmas MJ, et al. (2025) Interpreting mammalian synonymous site conservation in light of the unwanted transcript hypothesis. *Nature communications*, 16(1), 2007.

Trinh LT, et al. (2025) Positive autoregulation of Sox17 is necessary for gallbladder and extrahepatic bile duct formation. *Development (Cambridge, England)*, 152(2).

Li YY, et al. (2025) Pathogenicity and Genomic Characterization of *Pasteurella multocida* Serogroup F Isolate AH01 From Porcine Pneumonia in China. *Transboundary and emerging diseases*, 2025, 9979547.

Ivankovi?? M, et al. (2024) A comparative analysis of planarian genomes reveals regulatory conservation in the face of rapid structural divergence. *Nature communications*, 15(1), 8215.

Eastment RV, et al. (2024) Convergent genomic signatures associated with vertebrate viviparity. *BMC biology*, 22(1), 34.

Wang J, et al. (2024) Pathogenic and genomic characterization of rabbit-sourced *Pasteurella multocida* serogroup F isolates recovered from dead rabbits with respiratory disease. *Microbiology spectrum*, 12(4), e0365423.

de Los Santos MR, et al. (2024) Divergent landscapes of A-to-I editing in postmortem and living human brain. *medRxiv : the preprint server for health sciences*.

Lei H, et al. (2024) Evolutionary origin of germline pathogenic variants in human DNA mismatch repair genes. *Human genomics*, 18(1), 5.

Li Y, et al. (2024) A novel pathogenic species of genus *Stenotrophomonas*: *Stenotrophomonas pigmentata* sp. nov. *Frontiers in cellular and infection microbiology*, 14, 1410385.

Ou JH, et al. (2024) Complex genetic architecture of the chicken Growth1 QTL region. *PloS one*, 19(5), e0295109.

Silvestro D, et al. (2024) Toward a Semi-Supervised Learning Approach to Phylogenetic Estimation. *Systematic biology*, 73(5), 789.

Kim BY, et al. (2024) Single-fly genome assemblies fill major phylogenomic gaps across the Drosophilidae Tree of Life. *PLoS biology*, 22(7), e3002697.

Xue M, et al. (2024) Identification and characterization of a potential strain for the production of polyhydroxyalkanoate from glycerol. *Frontiers in microbiology*, 15, 1413120.