

Resource Summary Report

Generated by NIF on May 2, 2025

NCBI BLAST

RRID:SCR_004870

Type: Tool

Proper Citation

NCBI BLAST (RRID:SCR_004870)

Resource Information

URL: <http://blast.ncbi.nlm.nih.gov/Blast.cgi>

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Description: Web search tool to find regions of similarity between biological sequences. Program compares nucleotide or protein sequences to sequence databases and calculates statistical significance. Used for identifying homologous sequences.

Abbreviations: BLAST

Synonyms: NCBI Basic Local Alignment Search Tool, NCBI BLAST, Basic Local Alignment Search Tool, BLAST

Resource Type: software resource, data access protocol, sequence analysis software, web service, data processing software, data analysis software, software application

Defining Citation: [PMID:16845079](#), [PMID:18440982](#)

Keywords: genome, similarity, sequence, nucleotide, protein, gene, data, bio.tools

Funding: National Library of Medicine

Availability: Free, Freely available, Tutorial available

Resource Name: NCBI BLAST

Resource ID: SCR_004870

Alternate IDs: OMICS_01436, nlx_84530, biotools:blast

Alternate URLs: <http://blast.ncbi.nlm.nih.gov>, <https://bio.tools/blast>,

[https://sources.debian.org/src/ncbi-blast+/-](https://sources.debian.org/src/ncbi-blast+/)

Record Creation Time: 20220129T080227+0000

Record Last Update: 20250502T055513+0000

Ratings and Alerts

No rating or validation information has been found for NCBI BLAST.

No alerts have been found for NCBI BLAST.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 14042 mentions in open access literature.

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

Bende G, et al. (2025) The Neosartorya (Aspergillus) fischeri antifungal protein NFAP2 has low potential to trigger resistance development in *Candida albicans* in vitro. *Microbiology spectrum*, 13(1), e0127324.

Qiao Y, et al. (2025) Biosynthesis of the benzylpyrrolidine precursor in anisomycin by a unique ThDP-dependent enzyme. *Synthetic and systems biotechnology*, 10(1), 76.

Haenni M, et al. (2025) Distinct molecular epidemiology of resistances to extended-spectrum cephalosporins and carbapenems in *Enterobacter hormaechei* in cats and dogs versus horses in France. *The Journal of antimicrobial chemotherapy*, 80(2), 567.

Hassan AM, et al. (2025) Ongoing Evolution of Middle East Respiratory Syndrome Coronavirus, Saudi Arabia, 2023-2024. *Emerging infectious diseases*, 31(1), 57.

Liu Z, et al. (2025) Heterologous and High Production of Ergothioneine in *Bacillus licheniformis* by Using Genes from Anaerobic Bacteria. *Metabolites*, 15(1).

Landi L, et al. (2025) Validation of *Monilinia fructicola* Putative Effector Genes in Different Host Peach (*Prunus persica*) Cultivars and Defense Response Investigation. *Journal of fungi (Basel, Switzerland)*, 11(1).

Xiao R, et al. (2025) Phylogeographic and genetic insights into *Sinonychia martensi*: an endemic cave-dwelling harvestman in Beijing. *BMC ecology and evolution*, 25(1), 5.

Liu X, et al. (2025) Comparative analysis of HKTs in six poplar species and functional

characterization of PyHKTs in stress-affected tissues. *BMC genomics*, 26(1), 18.

Šmiga ?, et al. (2025) Molecular detection of the zoonotic trematode *Centrocestus formosanus* (Nishigori, 1924) (Opisthorchiida, Heterophyidae) in Central Europe. *Veterinary research communications*, 49(2), 66.

Wu H, et al. (2025) Multiplexed transcriptomic analyzes of the plant embryonic hourglass. *Nature communications*, 16(1), 802.

Xu X, et al. (2025) Gene drive-based population suppression in the malaria vector *Anopheles stephensi*. *Nature communications*, 16(1), 1007.

Zhang Z, et al. (2025) Clonal Spread and Genetic Mechanisms Underpinning Ciprofloxacin Resistance in *Salmonella enteritidis*. *Foods* (Basel, Switzerland), 14(2).

Gao J, et al. (2025) Prevalent and Drug-Resistant Phenotypes and Genotypes of *Escherichia coli* Isolated from Healthy Cow's Milk of Large-Scale Dairy Farms in China. *International journal of molecular sciences*, 26(2).

Sedrakyan A, et al. (2025) Molecular Epidemiology and In-Depth Characterization of *Klebsiella pneumoniae* Clinical Isolates from Armenia. *International journal of molecular sciences*, 26(2).

Wang H, et al. (2025) Developing a novel TaqMan qPCR assay for optimizing *Salmonella Pullorum* detection in chickens. *The veterinary quarterly*, 45(1), 1.

Wang S, et al. (2025) Detection of human noroviruses in sewage by next generation sequencing in Shandong Province, 2019-2021. *Virology journal*, 22(1), 18.

Liang S, et al. (2025) The haploid induction ability analysis of various mutation of OsMATL and OsDMPs in rice. *BMC biology*, 23(1), 30.

Ngonini E, et al. (2025) Varying effects of *Vicia sativa* and *Vicia villosa* on bacterial composition and enzyme activities in nutrient-deficient sugarcane soils under greenhouse conditions. *Scientific reports*, 15(1), 3317.

Ramos GS, et al. (2025) Quality Assessment and Host Preference of *Telenomus podisi* (Hymenoptera: Scelionidae) for Fresh and Cryopreserved *Euschistus heros* (Hemiptera: Pentatomidae) Eggs. *Insects*, 16(1).

Shao Y, et al. (2025) Emerging antifungal resistance in *Trichophyton mentagrophytes*: insights from susceptibility profiling and genetic mutation analysis. *Emerging microbes & infections*, 14(1), 2450026.