

Resource Summary Report

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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: data processing software, sequence analysis software, data access protocol, data analysis software, software resource, web service, 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/>

Record Creation Time: 20220129T080227+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 15381 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#) .

Grimwood RM, et al. (2026) A Novel Crustavirus as a Candidate Aetiology of Tail Fan Necrosis in New Zealand Red Rock Lobsters, *Jasus edwardsii*. *Journal of fish diseases*, 49(2), e70033.

Xu X, et al. (2026) Distribution, prevalence of non-tuberculous mycobacteria on Hainan Island and antibiotic resistance of *Mycobacterium abscessus*. *Microbiology spectrum*, 14(1), e0113425.

Matthews MC, et al. (2026) A microbial safari: finding evidence of *Mycobacterium bovis* DNA in soil from the Kruger National Park, South Africa. *Microbiology spectrum*, 14(1), e0165825.

Hu Y, et al. (2026) Global epidemiological and genetic characteristics of carbapenem-resistant *Escherichia coli* carrying blaIMP. *Microbiology spectrum*, 14(1), e0324425.

Han R, et al. (2026) Gut microbiota *Lactobacillus johnsonii* alleviates hyperuricemia by modulating intestinal urate and gut microbiota-derived butyrate. *Chinese medical journal*, 139(1), 118.

Munday JS, et al. (2026) Feline oral in situ carcinoma associated with papillomavirus infection: A case series of 7 cats. *Veterinary pathology*, 63(1), 33.

Peng Y, et al. (2026) Halophyte-Derived *Kushneria* Strains Enhance Salt Tolerance and Rhizosphere Dynamics in Cabbage. *Plant, cell & environment*, 49(1), 531.

Parra-Torres M, et al. (2026) Aberrant NSUN1 activity connects m5C-RNA modification to TDP-43 neurotoxicity in ALS/FTD. *Life science alliance*, 9(1).

Nakamura M, et al. (2026) Chromatin-associated DEK proteins maintain H3K27me3 balance and coordinate developmental transitions in plants. *The New phytologist*, 249(2), 930.

Hirakawa H, et al. (2026) Clinical, virological, and immunohistochemical features of laryngeal papilloma with low-risk human papillomavirus infection: insights from a 13-year institutional cohort. *World journal of surgical oncology*, 24(1), 6.

Pasha AVK, et al. (2026) Immunoinformatics-Based Multi-Epitope Vaccine Targeting *Helicobacter Pylori*. *Cancer reports (Hoboken, N.J.)*, 9(1), e70441.

Sari E, et al. (2026) Gene duplication, horizontal gene transfer, and trait trade-offs drive evolution of postfire resource acquisition in pyrophilous fungi. *Proceedings of the National Academy of Sciences of the United States of America*, 123(1), e2519152123.

Jiang JK, et al. (2026) Interleukin-17 receptor A drives cancer stem-like properties in colorectal cancer through STAT3 activation. *Journal of Cancer*, 17(1), 74.

Sugimoto T, et al. (2026) Association of Preoperative Gut Microbiota Disturbances with Postoperative Infectious Complications in Major Gastrointestinal Cancer Surgery: A Large-Scale Exploratory Study. *Annals of surgical oncology*, 33(1), 224.

Fischer MC, et al. (2026) Splicing and frameshift variants in QSER1 may be involved in developmental phenotypes. *HGG advances*, 7(1), 100539.

Barel M, et al. (2026) Colistin and Biofilm-Related Genes of Positive *Escherichia coli* O157:H7 in Cattle (*Bos taurus*) Carcasses Antibiotic Resistance Profiles, Biofilm and Molecular Characterisation of Isolates. *Veterinary medicine and science*, 12(1), e70730.

Kennard AS, et al. (2025) Tubulin sequence divergence is associated with the use of distinct microtubule regulators. *Current biology : CB*, 35(2), 233.

Azam S, et al. (2025) Advancing the Indian cattle pangenome: characterizing non-reference sequences in *Bos indicus*. *Journal of animal science and biotechnology*, 16(1), 21.

Turner LA, et al. (2025) Differences in gene expression between high and low tolerance rainbow trout (*Oncorhynchus mykiss*) to acute thermal stress. *PloS one*, 20(1), e0312694.

Santiago-Borges JM, et al. (2025) Uropathogenic *Escherichia coli* niche occupancy determines the effects of mucosal vaccine against FimH. *Cell reports*, 44(8), 116077.