

Resource Summary Report

Generated by [SPARC SAWG](#) on Sep 13, 2026

TIGRFAMS

RRID:SCR_005493

Type: Tool

Proper Citation

TIGRFAMS (RRID:SCR_005493)

Resource Information

URL: <http://www.jcvi.org/cgi-bin/tigrfams/index.cgi>

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Description: Consists curated multiple sequence alignments, Hidden Markov Models (HMMs) for protein sequence classification, and associated information designed to support automated annotation of (mostly prokaryotic) proteins. Starting with release 10.0, TIGRFAMS models use HMMER3, which provides excellent search speed as well as exquisite search sensitivity. See the "TIGRFAMS Complete Listing" page to review the accession, protein name, model type, and EC number (if assigned) of all models. TIGRFAMS is a member database in InterPro. The HMM libraries and supporting files are available to download and use for free from our FTP site.

Abbreviations: JCVI TIGRFAMS, TIGRFAM

Synonyms: TIGRFAMS

Resource Type: data or information resource, data set, database

Defining Citation: [PMID:23197656](#)

Keywords: sequence alignment, hidden markov model, protein sequence, classification, protein, protein family, sequence homology, sequence, homology, function, bio.tools

Availability: Free

Resource Name: TIGRFAMS

Resource ID: SCR_005493

Alternate IDs: nif-0000-03560, OMICS_01700, biotools:tigrfams

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

Old URLs: <http://www.tigr.org/TIGRFAMs>

Record Creation Time: 20220129T080230+0000

Record Last Update: 20260912T195627+0000

Ratings and Alerts

No rating or validation information has been found for TIGRFAMS.

No alerts have been found for TIGRFAMS.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 142 mentions in open access literature.

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

Ou T, et al. (2026) *Pseudomonas koreensis* HLG18 improves mulberry waterlogging resilience in riparian zone by synergistically modulating endophytic microbiome and metabolic profiles. *Microbiology spectrum*, 14(3), e0295925.

Harrass S, et al. (2026) Lactobacilli Probiotics Prevent Amyloid-Beta Fibril Formation In Vitro. *Probiotics and antimicrobial proteins*, 18(3), 4640.

Rodriguez-Cruz UE, et al. (2026) Unveiling a Microbial Treasure Trove: Phylogenetic Diversity and Bioremediation Potential in a High-Altitude Andean Saline System. *Microbial ecology*, 89(1).

Chen N, et al. (2026) A Chromosome-Level Genome Assembly and Annotation of the Chinese Porcupine (*Hystrix hodgsoni*) Reveals the Expansion of Olfactory-Related Gene Families. *Genes*, 17(6).

Li XT, et al. (2026) A culturomics biobank decodes extremophile evolution and metabolism in acid mine drainage. *Environmental science and ecotechnology*, 32, 100722.

Jung D, et al. (2025) Comparative genomic analysis of *Escherichia coli* isolated from cases of bovine clinical mastitis and the dairy farm environment. *Microbial genomics*, 11(6).

Costa VA, et al. (2025) Phylogenetic Diversity and Geographic Distribution of Atlantic Salmon Calicivirus in Major Salmon Farming Regions. *Journal of fish diseases*, 48(6), e14107.

Smith NT, et al. (2025) Phylogenetic and biochemical analysis of the evolution and interdomain modularity of bifunctional L-fucokinase/GDP-fucose pyrophosphorylases. *The*

Journal of biological chemistry, 301(12), 110937.

Mukherjee I, et al. (2025) Cultivation, genomics, and giant viruses of a ubiquitous and heterotrophic freshwater cryptomonad. The ISME journal, 19(1).

Manias D, et al. (2025) A light-induced microprotein triggers regulated intramembrane proteolysis to promote photo-sensing in a pathogenic bacterium. Nature communications, 17(1), 182.

Menzio E, et al. (2025) Exploring the relationship between GBA1 host genotype and gut microbiome in the GBA1 L444P/WT mouse model: implications for Parkinson's disease pathogenesis. Frontiers in neuroscience, 19, 1546203.

Galib M, et al. (2025) Identification of robust species-specific marker genes for the demarcation of the *Klebsiella pneumoniae*-*quasipneumoniae*-*variicola* complex. Journal of medical microbiology, 74(11).

Degnan PH, et al. (2025) Coupled evolutionary rates shape a Hawaiian insect-symbiont system. BMC genomics, 26(1), 336.

Ba?c? C, et al. (2025) Ultra-deep long-read metagenomics captures diverse taxonomic and biosynthetic potential of soil microbes. GigaScience, 14.

Saeed H, et al. (2025) Characterization of holins, the membrane proteins of coliphage ASEC2201: a genomewide in silico approach. Frontiers in microbiology, 16, 1550594.

Du S, et al. (2025) House dust microbiome differentiation and phage-mediated antibiotic resistance and virulence dissemination in the presence of endocrine-disrupting chemicals and pharmaceuticals. Microbiome, 13(1), 96.

Costa VA, et al. (2025) Limited similarity in microbial composition among coral reef fishes from the Great Barrier Reef, Australia. FEMS microbiology ecology, 101(3).

Zhu X, et al. (2025) Virulence and Antibiotic Resistance of Pathogenic *Aeromonas caviae* from Diseased *Macrobrachium rosenbergii*. Microorganisms, 13(6).

Wu Y, et al. (2024) Evolution of two metabolic genes involved in nucleotide and amino acid metabolism in *Pseudomonas aeruginosa*. PloS one, 19(12), e0315931.

Arikan M, et al. (2024) gNOMO2: a comprehensive and modular pipeline for integrated multi-omics analyses of microbiomes. GigaScience, 13.