

Resource Summary Report

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ACT: Artemis Comparison Tool

RRID:SCR_004507

Type: Tool

Proper Citation

ACT: Artemis Comparison Tool (RRID:SCR_004507)

Resource Information

URL: <http://www.sanger.ac.uk/resources/software/act/>

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Description: A free tool for displaying pairwise comparisons between two or more DNA sequences. It can be used to identify and analyze regions of similarity and difference between genomes and to explore conservation of synteny, in the context of the entire sequences and their annotation. It is based on the software for Artemis, the genome viewer and annotation tool. ACT runs on UNIX, GNU/Linux, Macintosh and MS Windows systems. It can read complete EMBL and GENBANK entries or sequences in FASTA or raw format. Other sequence features can be in EMBL, GENBANK or GFF format.

Abbreviations: ACT

Synonyms: Artemis Comparison Tool

Resource Type: software resource

Defining Citation: [PMID:15976072](#)

Keywords: dna sequence, genome, synteny, pairwise comparison

Funding: Wellcome Trust

Availability: GNU General Public License

Resource Name: ACT: Artemis Comparison Tool

Resource ID: SCR_004507

Alternate IDs: OMICS_00928, nlx_48986

Record Creation Time: 20220129T080225+0000

Record Last Update: 20260815T182259+0000

Ratings and Alerts

No rating or validation information has been found for ACT: Artemis Comparison Tool.

No alerts have been found for ACT: Artemis Comparison Tool.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 47 mentions in open access literature.

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

Tang Y, et al. (2025) Surface hydrogen migration significantly promotes electroreduction of acetonitrile to ethylamine. *Nature communications*, 16(1), 2236.

Qiu Y, et al. (2025) Boosting oxygen reduction performances in Pd-based metallenes by co-confining interstitial H and p-block single atoms. *Nature communications*, 16(1), 5262.

Ding J, et al. (2025) Distinctly different active sites of ZnO-ZrO₂ catalysts in CO₂ and CO hydrogenation to methanol reactions. *Nature communications*, 16(1), 4622.

Zhong Y, et al. (2025) Enhanced dry reforming of methane over nickel catalysts supported on zirconia coated mesoporous silica. *iScience*, 28(6), 112582.

Karthika C, et al. (2025) Phage (cocktail)-antibiotic synergism: a new frontier in addressing *Klebsiella pneumoniae* resistance. *Frontiers in microbiology*, 16, 1588472.

Wiedemar N, et al. (2025) The Thienopyrimidinone Gamh  pathiopine Targets the QO Site of *Plasmodium falciparum* Cytochrome b. *ACS infectious diseases*, 11(6), 1719.

Liu X, et al. (2025) Regulating orbital interaction to construct quasi-covalent bond networks in Pt intermetallic alloys for high-performance fuel cells. *Nature communications*, 16(1), 4895.

Zhang L, et al. (2025) Spontaneous water dissociation on intermetallic electride LaCu_{0.67}Si_{1.33} enhances electrochemical methanization of CO₂. *Nature communications*, 16(1), 5039.

Cordeiro NF, et al. (2025) First Report in the Americas of *S. enterica* Var. Enteritidis Carrying bla_{NDM-1} in a Putatively New Sub-Lineage of IncC2 Plasmids. *Antibiotics (Basel, Switzerland)*, 14(6).

Yu Y, et al. (2025) Tunable Hierarchically Porous Gadolinium-Based Metal-Organic Frameworks for Bacteria-Targeting Magnetic Resonance Imaging and In Situ Anti-Bacterial Therapy. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 12(15), e2415209.

Scadden J, et al. (2025) The nisin O cluster: species dissemination, candidate leader peptide proteases and the role of regulatory systems. *Microbiology (Reading, England)*, 171(2).

Patheria ES, et al. (2025) High-Energy Density Li-Ion Battery Cathode Using Only Industrial Elements. *Journal of the American Chemical Society*, 147(11), 9786.

Xiao Y, et al. (2025) Tracing the origin of near-infrared emissions emanating from manganese (II). *Light, science & applications*, 14(1), 194.

Li Z, et al. (2025) Retention of high-pressure solution-processable metastable phase to ambience via differential sublattice rigidity for broadband photodetectors. *Nature communications*, 16(1), 2246.

Huertas-Díaz L, et al. (2025) Insights into the utilisation of 1,2-propanediol and interactions with the cell envelope of *Clostridium perfringens*. *Gut pathogens*, 17(1), 23.

Ma L, et al. (2025) Cu supraparticles with enhanced mass transfer and abundant C-C coupling sites achieving ampere-level CO₂-to-C₂⁺ electrosynthesis. *Nature communications*, 16(1), 3421.

López-Méndez R, et al. (2025) Multiscale Thermal Analysis of Gold Nanostars in 3D Tumor Spheroids: Integrating Cellular-Level Photothermal Effects and Nanothermometry via X-Ray Spectroscopy. *Advanced healthcare materials*, 14(11), e2403799.

Hamed EM, et al. (2025) Zinc Single-Atom Nanozyme As Carbonic Anhydrase Mimic for CO₂ Capture and Conversion. *ACS materials Au*, 5(2), 377.

Wertz AE, et al. (2025) A semisynthetic, multifactor artificial metalloenzyme retains independent site activity. *Journal of biological inorganic chemistry : JBIC : a publication of the Society of Biological Inorganic Chemistry*, 30(1), 13.

Woods PH, et al. (2025) Identification of key steps in the evolution of anaerobic methanotrophy in *Candidatus Methanovorans* (ANME-3) archaea. *Science advances*, 11(25), eadq5232.