

Resource Summary Report

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MUSCLE

RRID:SCR_011812

Type: Tool

Proper Citation

MUSCLE (RRID:SCR_011812)

Resource Information

URL: <http://www.ebi.ac.uk/Tools/msa/muscle/>

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Description: Multiple sequence alignment method with reduced time and space complexity. Multiple sequence alignment with high accuracy and high throughput. Data analysis service for multiple sequence comparison by log- expectation.

Abbreviations: MUSCLE

Synonyms: Multiple Sequence Comparison by Log- Expectation

Resource Type: data analysis service, image analysis software, data analysis software, service resource, alignment software, software application, data processing software, production service resource, software resource, analysis service resource

Defining Citation: [PMID:15034147](#), [PMID:15318951](#), [DOI:10.1093/nar/gkh340](#)

Keywords: bio.tools

Resource Name: MUSCLE

Resource ID: SCR_011812

Alternate IDs: biotools:muscle, OMICS_00982

Alternate URLs: <https://bio.tools/muscle>, <http://www.drive5.com/muscle/>, <https://www.drive5.com/muscle/manual/>, <https://www.drive5.com/muscle/manual/install.html>, <http://bioconductor.org/packages/release/bioc/html/muscle.html>, <https://sources.debian.org/src/muscle/>

Record Creation Time: 20220129T080306+0000

Record Last Update: 20260801T190748+0000

Ratings and Alerts

No rating or validation information has been found for MUSCLE.

No alerts have been found for MUSCLE.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 16137 mentions in open access literature.

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

Bonomo M, et al. (2026) Non-Invasive Underwater DNA Sampling Illuminates Red Sea Echinoderm Diversity. *Molecular ecology resources*, 26(1), e70059.

Viruel J, et al. (2026) Phylogenomic Barcoding of Soil Seed Bank-Persistent and Wind-Dispersed Non-Native Plant Species in South Georgia. *Molecular ecology resources*, 26(1), e70068.

Nascimento JPM, et al. (2026) Arrival of Oropouche Virus in a Nonendemic Area in Northeastern Brazil, 2024. *Journal of medical virology*, 98(1), e70780.

Kincer LP, et al. (2026) Neurosymptomatic Cerebrospinal Fluid Escape Is a Central Nervous System-Focused Form of Antiretroviral Therapy Treatment Failure. *Open forum infectious diseases*, 13(1), ofaf659.

Fogg LG, et al. (2026) The visual system of the longest-living vertebrate, the Greenland shark. *Nature communications*, 17(1), 39.

Kitsui R, et al. (2026) A light-entrained clock mechanism in a hydrozoan jellyfish synchronizes evening gamete release. *PLoS biology*, 24(1), e3003502.

Gao C, et al. (2026) High-Quality Genome Assembly of *Diplocarpon coronariae* Unveils LTR Retrotransposon-Driven Structural Dynamics in Fungi Evolution. *Molecular ecology resources*, 26(1), e70070.

Gorman LM, et al. (2026) Coral Venom and Toxins as Protection Against Crown-of-Thorns Sea Star Attack. *Molecular ecology*, 35(1), e70202.

Garg P, et al. (2026) Emerging genetic diversity and molecular epidemiology of *Entamoeba moshkovskii* among patients with acute diarrhoea in Northern India. *Tropical medicine and health*, 54(1), 3.

Zhang H, et al. (2026) Development of a Porcine Cell Line Stably Expressing Ephrin-B2 for Nipah Virus Research and Diagnostic Testing. *Microbiology and immunology*, 70(1), 36.

Lawson LP, et al. (2026) Whole-genome sequence of the African Common Reed Frog (*Hyperolius viridiflavus viridiflavus*) from Ethiopia. *G3* (Bethesda, Md.), 16(1).

Ahmed FH, et al. (2026) Disordered N-termini enhance the thermostability of SGNH-hydrolase family polyesterases. *Protein science : a publication of the Protein Society*, 35(1), e70402.

Javier MCF, et al. (2025) Draft genome of the endangered visayan spotted deer (*Rusa alfredi*), a Philippine endemic species. *GigaByte* (Hong Kong, China), 2025, gigabyte150.

Bian C, et al. (2025) Chromosome-level genome assemblies of five *Sinocyclocheilus* species. *GigaByte* (Hong Kong, China), 2025, gigabyte155.

Chen PY, et al. (2025) Previously unrecognized diversity of far-red light-using terrestrial green algae and cyanobacteria. *iScience*, 28(10), 113486.

Unitt A, et al. (2025) *Neisseria gonorrhoeae* LIN codes provide a robust, multi-resolution lineage nomenclature. *eLife*, 14.

Huang A, et al. (2025) A genetic circuit that extends the useful range of a BMP morphogen arose alongside insect wing evolution. *Current biology : CB*, 35(23), 5840.

Naktang C, et al. (2025) Chromosome-level assemblies of two hexaploid bamboos, *Thyrsostachys oliveri* and *Thyrsostachys siamensis*, provide a foundation for functional and comparative genomics studies. *GigaScience*, 14.

De Coninck T, et al. (2025) OsAPSE modulates non-covalent interactions between arabinogalactan protein O-glycans and pectin in rice cell walls. *Frontiers in plant science*, 16, 1588802.

Yuan J, et al. (2025) A telomere-to-telomere genome assembly of koi carp (*Cyprinus carpio*) using long reads and Hi-C technology. *GigaScience*, 14.