Resource Summary Report

Generated by NIF on May 20, 2025

Clustal Omega

RRID:SCR_001591
Type: Tool

Proper Citation

Clustal Omega (RRID:SCR_001591)

Resource Information

URL: http://www.ebi.ac.uk/Tools/msa/clustalo/

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Description: Software package as multiple sequence alignment tool that uses seeded guide trees and HMM profile-profile techniques to generate alignments between three or more sequences. Accepts nucleic acid or protein sequences in multiple sequence formats NBRF/PIR, EMBL/UniProt, Pearson (FASTA), GDE, ALN/Clustal, GCG/MSF, RSF.

Abbreviations: Clustal Omega, Clustalo

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

Defining Citation: PMID:21988835, PMID:20439314, DOI:10.1038/msb.2011.75

Keywords: multiple, sequence, alignment, DNA, RNA, protein, generate, bio.tools

Funding: Science Foundation Ireland

Availability: Free, Available for download, Freely available, Acknowledgement requested

Resource Name: Clustal Omega

Resource ID: SCR_001591

Alternate IDs: OMICS_00972, SCR_016062, biotools:clustalo, nlx_153836

Alternate URLs: https://sources.debian.org/src/clustalo/, http://www.clustal.org/omega/, http://mobyle.pasteur.fr/cgi-bin/portal.py#forms::clustalO-multialign, https://bio.tools/clustalo,

https://sources.debian.org/src/clustalo/

License: GNU lesser GPL

Record Creation Time: 20220129T080208+0000

Record Last Update: 20250519T203138+0000

Ratings and Alerts

No rating or validation information has been found for Clustal Omega.

No alerts have been found for Clustal Omega.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 8943 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

Heine HS, et al. (2025) Evaluation of a potent LpxC inhibitor for post-exposure prophylaxis treatment of antibiotic-resistant Burkholderia pseudomallei in a murine infection model. Antimicrobial agents and chemotherapy, 69(1), e0129524.

Cui J, et al. (2025) Genome-wide identification and expression analysis of CBF/DREB1 gene family in Medicago sativa L. and functional verification of MsCBF9 affecting flowering time. BMC plant biology, 25(1), 87.

Scarpato M, et al. (2025) A Novel Variant in TUBB4B Causes Progressive Cone-Rod Dystrophy and Early Onset Sensorineural Hearing Loss. Molecular genetics & genomic medicine, 13(2), e70068.

Yacoub E, et al. (2025) A sweeping view of avian mycoplasmas biology drawn from comparative genomic analyses. BMC genomics, 26(1), 24.

Ripoll L, et al. (2025) Insect-specific RNA viruses detection in Field-Caught Aedes aegypti mosquitoes from Argentina using NGS technology. PLoS neglected tropical diseases, 19(1), e0012792.

McLean FE, et al. (2025) Identification of novel PfEMP1 variants containing domain cassettes 11, 15 and 8 that mediate the Plasmodium falciparum virulence-associated rosetting phenotype. PLoS pathogens, 21(1), e1012434.

Ries F, et al. (2025) A truncated variant of the ribosome-associated trigger factor specifically contributes to plant chloroplast ribosome biogenesis. Nature communications, 16(1), 629.

Kim A, et al. (2025) Mice deficient in TWIK-1 are more susceptible to kainic acid-induced seizures. iScience, 28(1), 111587.

Ghorbani A, et al. (2025) AutoPVPrimer: A comprehensive AI-Enhanced pipeline for efficient plant virus primer design and assessment. PloS one, 20(1), e0317918.

Marter P, et al. (2025) Superior Resolution Profiling of the Coleofasciculus Microbiome by Amplicon Sequencing of the Complete 16S rRNA Gene and ITS Region. Environmental microbiology reports, 17(1), e70066.

Vuillemin M, et al. (2025) Discovery of Lacto-N-Biosidases and a Novel N-Acetyllactosaminidase Activity in the CAZy Family GH20: Functional Diversity and Structural Insights. Chembiochem : a European journal of chemical biology, 26(2), e202400710.

Wang J, et al. (2025) Identification and structure-guided development of triazole urea-based selective antagonists of Arabidopsis karrikin signaling. Nature communications, 16(1), 104.

Madjdzadeh SM, et al. (2025) Presence of the Anopheles culicifacies complex species A in southeast Iran. Tropical medicine and health, 53(1), 8.

Le NP, et al. (2025) Molecular characterization of swine acute diarrhea syndrome coronavirus detected in Vietnamese pigs. Veterinary research, 56(1), 4.

Roopin M, et al. (2025) Synthetic rational design of live-attenuated Zika viruses based on a computational model. Nucleic acids research, 53(2).

Hytönen MK, et al. (2025) IP3 receptor depletion in a spontaneous canine model of Charcot-Marie-Tooth disease 1J with amelogenesis imperfecta. PLoS genetics, 21(1), e1011328.

Halfmann PJ, et al. (2025) Multivalent S2 subunit vaccines provide broad protection against Clade 1 sarbecoviruses in female mice. Nature communications, 16(1), 462.

Jordano-Raya M, et al. (2025) Divergent evolution of opposite base specificity and single-stranded DNA activity in animal and plant AP endonucleases. Nucleic acids research, 53(1).

Ghiotto G, et al. (2025) Impact of trace metal supplementation on anaerobic biological methanation under hydrogen and carbon dioxide starvation. NPJ biofilms and microbiomes, 11(1), 7.

Ma S, et al. (2025) Development of a novel multi-epitope subunit mRNA vaccine candidate to combat Acinetobacter baumannii. Scientific reports, 15(1), 1410.