

Resource Summary Report

Generated by [kravitz2](#) on Jul 31, 2026

HOMER

RRID:SCR_010881

Type: Tool

Proper Citation

HOMER (RRID:SCR_010881)

Resource Information

URL: <http://homer.ucsd.edu/>

Proper Citation: HOMER (RRID:SCR_010881)

Description: Software tools for Motif Discovery and next-gen sequencing analysis. Used for analyzing ChIP-Seq, GRO-Seq, RNA-Seq, DNase-Seq, Hi-C and numerous other types of functional genomics sequencing data sets. Collection of command line programs for unix style operating systems written in Perl and C++.

Abbreviations: HOMER

Synonyms: HOMER, Hypergeometric Optimization of Motif EnRichment, Homer, Homer v4.5

Resource Type: data processing software, sequence analysis software, data analysis software, software resource, software application

Defining Citation: [PMID:20513432](#)

Keywords: motif, discovery, next, generation, sequencing, analysis, genomic, data

Funding: NURSA consortium grant ;
NIH HC088093;
NIDDK DK063491;
NCI CA52599;
NIGMS P50 GM081892;
Foundation Leducq Transatlantic Network Grant

Resource Name: HOMER

Resource ID: SCR_010881

Alternate IDs: OMICS_00483

Alternate URLs: <http://biowhat.ucsd.edu/homer/index.html>

Record Creation Time: 20220129T080301+0000

Record Last Update: 20260731T042836+0000

Ratings and Alerts

No rating or validation information has been found for HOMER.

No alerts have been found for HOMER.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 5370 mentions in open access literature.

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

Chen Y, et al. (2026) The transcription factor CUX1 exerts opposing roles in human and mouse adipocyte differentiation. *Molecular metabolism*, 103, 102290.

Arai M, et al. (2026) Oral antigen exposure under costimulation blockade induces Treg cells to establish immune tolerance. *The Journal of experimental medicine*, 223(3).

Xiao L, et al. (2026) Small Extracellular Vesicles From Human Amniotic Membrane Mesenchymal Stem Cells Rejuvenate Senescent ? Cells and Cure Age-Related Diabetes in Mice. *Aging cell*, 25(1), e70327.

Sinke L, et al. (2026) DNA methylation of genes involved in lipid metabolism drives adiponectin levels and metabolic disease. *Diabetologia*, 69(1), 127.

Zarodniuk M, et al. (2026) Mechanical compression induces neuronal apoptosis, reduces synaptic activity, and promotes glial neuroinflammation in mice and humans. *Proceedings of the National Academy of Sciences of the United States of America*, 123(1), e2513172122.

Santos M, et al. (2026) Comprehensive Mapping of Functional Enhancers in Chinese Hamster Ovary Cells. *Biotechnology and bioengineering*, 123(1), 196.

Kama Y, et al. (2026) Notch interaction with RUNX factors regulates initiation of the T-lineage program. *The Journal of experimental medicine*, 223(2).

Mao L, et al. (2026) Super-enhancer-driven core transcription factor FOXP1 delays endothelial cell senescence via phase separation-mediated SESN3 activation. *Theranostics*, 16(3), 1386.

Blanch TE, et al. (2026) Age-Dependent Chromatin Remodeling Drives Inflammatory Dysregulation in Tendon Cells. *bioRxiv : the preprint server for biology*.

Xu Y, et al. (2026) From degraded to deciphered: Applying ATAC-seq to forensic molecular diagnosis under degradation conditions. *Forensic science international*, 379, 112789.

Nitsch S, et al. (2026) H4K16 acylations destabilize chromatin architecture and facilitate transcriptional response during metabolic perturbations. *Molecular cell*, 86(1), 24.

Estermann MA, et al. (2025) NR2F2 regulation of interstitial cell fate in the embryonic mouse testis and its impact on differences of sex development. *Nature communications*, 16(1), 3987.

Qian W, et al. (2025) Single-cell transcriptomic and m6A methylation analyses reveal platelet-mediated immune regulatory mechanisms in sepsis. *Frontiers in immunology*, 16, 1607732.

Pakula A, et al. (2025) An increase in reactive oxygen species underlies neonatal cerebellum repair. *eLife*, 14.

Tiedje V, et al. (2025) Loss of tumor cell MHC class II drives MAPK inhibitor insensitivity of BRAF-mutant anaplastic thyroid cancers. *The Journal of clinical investigation*, 135(20).

Umrigar A, et al. (2025) CFTR Gene Regulation in Human Pancreatic Duct, Bile Duct and Sweat Gland Epithelial Cells. *Journal of cellular and molecular medicine*, 29(15), e70751.

Baba T, et al. (2025) Enlarged PML-nuclear bodies trigger conflicting cell cycle signal-mediated cytotoxicity in leukemia cells. *Cell death & disease*, 16(1), 586.

Liu A, et al. (2025) Transcriptome-wide regulation of folate on neural mRNA m6A methylome via carbon metabolism in *Drosophila* and mammals. *Communications biology*, 8(1), 1151.

Sugo N, et al. (2025) DNA polymerase ϵ suppresses somatic indels at CpG dinucleotides in developing cortical neurons. *Proceedings of the National Academy of Sciences of the United States of America*, 122(33), e2506846122.

Guo XL, et al. (2025) Fetal hepatocytes protect the HSPC genome via fetuin-A. *Nature*, 637(8045), 402.