

Resource Summary Report

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Bowtie 2

RRID:SCR_016368

Type: Tool

Proper Citation

Bowtie 2 (RRID:SCR_016368)

Resource Information

URL: <http://bowtie-bio.sourceforge.net/bowtie2/index.shtml>

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Description: Ultrafast and memory efficient tool for aligning sequencing reads to long reference sequences. Supports gapped, local, and paired end alignment modes. More suited to finding longer, gapped alignments in comparison with original Bowtie method.

Synonyms: , bowtie 2, bowtie2 v 2.2.3

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

Defining Citation: [PMID:22388286](#)

Keywords: sequence, analysis, long, reference, sequence, read, alignment, gap, local, pair, end, rna, rnaseq, bio.tools

Funding: NHGRI R01 HG006102;
NIGMS R01 GM083873

Availability: Free, Available for download, Freely available

Resource Name: Bowtie 2

Resource ID: SCR_016368

Alternate IDs: biotools:bowtie2

Alternate URLs: <http://bowtie-bio.sourceforge.net/bowtie2/index.shtml>,
<https://github.com/BenLangmead/bowtie2>, <https://bio.tools/bowtie2>

License: GNU General Public License v3.0

Record Creation Time: 20220129T080321+0000

Record Last Update: 20260731T042926+0000

Ratings and Alerts

No rating or validation information has been found for Bowtie 2.

No alerts have been found for Bowtie 2.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 1745 mentions in open access literature.

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

Kong Y, et al. (2026) Prebiotics as adjunctive treatment ameliorates DSS-induced colitis and gut microbiota. Microbiology spectrum, 14(1), e0150225.

Liang Y, et al. (2026) DMTF1 up-regulation rescues proliferation defect of telomere dysfunctional neural stem cells via the SWI/SNF-E2F axis. Science advances, 12(1), eady5905.

Patel UA, et al. (2026) CRISPR Screen Identifies HDAC3 as a Novel Radiosensitizing Target in Small Cell Lung Cancer. Molecular cancer therapeutics, 25(1), 183.

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

Pereira-Martins DA, et al. (2026) ?Np73 isoform defines a TP53-mutant-like poor-risk subgroup of acute myeloid leukemia. Cell reports. Medicine, 102540.

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

Movilli A, et al. (2025) Long-read detection of transposable element mobilization in the soma of hypomethylated Arabidopsis thaliana individuals. Genome biology, 26(1), 231.

Wang C, et al. (2025) Viral oncogene EBNA1P regulates YY1 DNA binding and alters host 3D genome organization. EMBO reports, 26(3), 810.

Kuroha K, et al. (2025) Abnormal H3K27me3 underlies degenerative spermatogonial stem cells in cryptorchid testis. Development (Cambridge, England), 152(2).

Munakata Y, et al. (2025) Chromatin remodeler CHD4 establishes chromatin states required for ovarian reserve formation, maintenance and male germ cell survival. *Nucleic acids research*, 53(3).

Litz B, et al. (2025) Distinct mutations emerge in the genome of serotype O foot-and-mouth disease virus during persistence in cattle. *Journal of virology*, 99(3), e0142224.

Cumming J, et al. (2025) Dissecting FAP+ Cell Diversity in Pancreatic Cancer Uncovers an Interferon-Response Subtype of Cancer-Associated Fibroblasts with Tumor-Restraining Properties. *Cancer research*, 85(13), 2388.

Li S, et al. (2025) Spatiotemporal composition and diversity of endophyte communities in *Dracaena cambodiana* on Hainan Island. *Frontiers in microbiology*, 16, 1540669.

Zhou Y, et al. (2025) Cellular senescence-associated gene IFI16 promotes HMOX1-dependent evasion of ferroptosis and radioresistance in glioblastoma. *Nature communications*, 16(1), 1212.

Vemuri K, et al. (2025) Diet-induced obesity mediated through estrogen-related receptor ? is independent of intestinal function. *The Journal of biological chemistry*, 301(2), 108197.

Wang K, et al. (2025) Protocol for assessing regulatory elements in murine heart using an AAV9-based massively parallel reporter assay. *STAR protocols*, 6(2), 103782.

Ao J, et al. (2025) Shrub encroachment alters microbial community composition and soil carbon and nitrogen cycling functional genes in northern peatlands. *Microbiology spectrum*, 13(10), e0054225.

Yang J, et al. (2025) Genome-assisted identification of wheat leaf rust resistance gene *Lr.ace-4A/Lr30*. *Nature communications*, 16(1), 9339.

Finlay-Schultz J, et al. (2025) Maf1 cooperates with progesterone receptor to repress RNA polymerase III transcription of select tRNAs. *Nucleic acids research*, 53(20).

Zhang S, et al. (2025) Mitochondrial genome assembly and comparative analysis of decaploid *Camellia hainanica*. *Frontiers in plant science*, 16, 1556379.