

Resource Summary Report

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DESeq2

RRID:SCR_015687

Type: Tool

Proper Citation

DESeq2 (RRID:SCR_015687)

Resource Information

URL: <https://bioconductor.org/packages/release/bioc/html/DESeq2.html>

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Description: Software package for differential gene expression analysis based on the negative binomial distribution. Used for analyzing RNA-seq data for differential analysis of count data, using shrinkage estimation for dispersions and fold changes to improve stability and interpretability of estimates.

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

Keywords: differential, gene, expression, analysis, binominal, distribution, RNA-seq data, Bioconductor, bio.tools

Funding: International Max Planck Research School for Computational Biology and Scientific Computing ;
NCI T32 CA009337;
European Union's 7th Framework Programme

Availability: Free, Available for download, Freely available

Resource Name: DESeq2

Resource ID: SCR_015687

Alternate IDs: biotools:deseq2

Alternate URLs: <https://github.com/mikelove/DESeq2>, <https://bio.tools/deseq2>

License: LGPL

Record Creation Time: 20220129T080327+0000

Record Last Update: 20260808T190238+0000

Ratings and Alerts

No rating or validation information has been found for DESeq2.

No alerts have been found for DESeq2.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 50789 mentions in open access literature.

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

D'Alessio A, et al. (2026) Neurometabolic adaptations to intestinal inflammation in a mouse model of colitis. American journal of physiology. Gastrointestinal and liver physiology, 330(2), G98.

Fresques T, et al. (2026) YAP1 Dysfunction Promotes Molecular Properties Linked to Breast Cancer Susceptibility. Cancer prevention research (Philadelphia, Pa.), 19(4), 203.

Prasad M, et al. (2026) Genomic Enrichment and Functional Impact of TP53 and CYLD Alterations in Recurrent and Metastatic HPV-Associated Head and Neck Cancer. Clinical cancer research : an official journal of the American Association for Cancer Research, 32(9), 1809.

Cappadona C, et al. (2026) Multi-omics identifies oxidative stress, prothrombotic pathways, and lactoperoxidase variants as key factors in COVID-19 severity. EBioMedicine, 123, 106111.

Sato K, et al. (2026) Aberrant Hippo-YAP/TEAD Signaling Drives Malignant Transcriptional Reprogramming in External Auditory Canal Squamous Cell Carcinoma. Cancer research communications, 6(2), 260.

Ito T, et al. (2026) RLF/ZFP292 stabilize CoREST-linked LSD1 engagement at bivalent promoters to safeguard pluripotency. Cell reports, 45(4), 117293.

van der Elst A, et al. (2026) Molecular and Immune Landscape of Recurrent and/or Distant Metastatic Squamous Cell Carcinoma of the Head and Neck: An EORTC/IMMUCAN Project. Clinical cancer research : an official journal of the American Association for Cancer Research, 32(13), 2732.

Zhao S, et al. (2026) RNF25 confers mRNA damage tolerance by curbing activation of the integrated stress response. Molecular cell, 86(7), 1275.

Weerasopon K, et al. (2026) Loss of Ezh2 promotes M2-like macrophage polarization in hepatocellular carcinoma. iScience, 29(4), 115180.

Herbrich S, et al. (2026) TET2-mutant clonal hematopoiesis enhances macrophage antigen presentation and improves immune checkpoint therapy in solid tumors. *Cancer cell*, 44(1), 187.

Huang Y, et al. (2026) A positive feedback loop between FGR and p65 sustains satellite glial cell activation and chronic neuropathic pain. *Cell reports*, 45(2), 116899.

Li H, et al. (2026) Tumor Extracellular Vesicles IncOSLMT Drives Lung Inflammatory Premetastatic Niche Formation in Osteosarcoma via m6A-Dependent hnRNPA2B1/COX-2 Axis. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(17), e19490.

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

Yang Z, et al. (2026) Syndecan-1-targeted therapeutic antibody impairs macropinocytosis and elicits antitumor immunity in pancreatic cancer. *Cell reports. Medicine*, 7(2), 102613.

Yang J, et al. (2026) A Malignant Subpopulation of H2AFZ+ Cells Interacts with Myeloid Cells to Promote an Anti-inflammatory Microenvironment and Drive Hepatic Metastasis, Revealing an Immunotherapeutic Strategy for Pancreatic Ductal Adenocarcinoma. *Clinical cancer research : an official journal of the American Association for Cancer Research*, 32(12), 2479.

Tollenaere A, et al. (2026) Mechanisms of gene regulation by SRCAP and H2A.Z. *Nature communications*, 17(1).

Fang K, et al. (2026) Pharmaco-genomic characterization of pancreatic and biliary tract cancer tumoroids for drug response. *iScience*, 29(3), 115062.

Kim SK, et al. (2026) Human-specific features of the cerebellum and ZP2-regulated synapse development. *Cell*, 189(6), 1802.

Al-Azzam S, et al. (2026) Multi-omics profiling reveals microenvironmental remodeling as a key driver of house dust mite-induced lung cancer progression. *Neoplasia* (New York, N.Y.), 73, 101275.

Tsymala I, et al. (2026) Innate lymphoid cells integrate sensing and plasticity to control fungal infections. *Cell reports*, 45(4), 117140.