

# Resource Summary Report

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## Rsubread

RRID:SCR\_016945

Type: Tool

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### Proper Citation

Rsubread (RRID:SCR\_016945)

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### Resource Information

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

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**Description:** Software R package for sequence alignment and counting for R. Used for analyses of second and third generation sequencing data, for read mapping, read counting, SNP calling, short and long read alignment, quantification and mutation discovery. Includes assessment of sequence reads, read alignment, read summarization, exon-exon junction detection, fusion detection, detection of short and long indels, absolute expression calling and SNP calling. Can be used with reads generated from any of the major sequencing platforms including Illumina GA/HiSeq/MiSeq, Roche GS-FLX, ABI SOLiD and LifeTech Ion PGM/Proton sequencers.

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

**Defining Citation:** [PMID:23558742](#)

**Keywords:** sequence, alignment, counting, multi, seed, strategy, mapping, read, reference, genome, analysis, data, SNP, calling, mutation, discovery, bio.tools

**Funding Agency:** Australian National Health and Medical Research Council , Victorian State Government Operational Infrastructure Support , Australian Government

**Availability:** Free, Available for download, Freely available

**Resource Name:** Rsubread

**Resource ID:** SCR\_016945

**Alternate IDs:** biotools:rsubread

**Alternate URLs:** <https://bio.tools/rsubread>

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## Ratings and Alerts

No rating or validation information has been found for Rsubread.

No alerts have been found for Rsubread.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 146 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [FDI Lab - SciCrunch.org](#).

Wang Z, et al. (2024) Loss-of-Function but Not Gain-of-Function Properties of Mutant TP53 Are Critical for the Proliferation, Survival, and Metastasis of a Broad Range of Cancer Cells. *Cancer discovery*, 14(2), 362.

Benjaskulluecha S, et al. (2024) O6-methylguanine DNA methyltransferase regulates ?-glucan-induced trained immunity of macrophages via farnesoid X receptor and AMPK. *iScience*, 27(1), 108733.

Xu H, et al. (2024) PP2A complex disruptor SET prompts widespread hypertranscription of growth-essential genes in the pancreatic cancer cells. *Science advances*, 10(4), eadk6633.

Shen X, et al. (2024) Transcriptome profiling reveals SLC5A5 regulates chicken ovarian follicle granulosa cell proliferation, apoptosis, and steroid hormone synthesis. *Poultry science*, 103(1), 103241.

Moore J, et al. (2024) Lack of TGF? signaling competency predicts conversion of immune poor cancer to immune rich and response to checkpoint blockade. *bioRxiv : the preprint server for biology*.

Valakh V, et al. (2023) A transcriptional constraint mechanism limits the homeostatic response to activity deprivation in mammalian neocortex. *eLife*, 12.

Hrabalova P, et al. (2023) Dysregulation of hypoxia-inducible factor 1? in the sympathetic nervous system accelerates diabetic cardiomyopathy. *Cardiovascular diabetology*, 22(1), 88.

Piovesana M, et al. (2023) A point mutation in the kinase domain of CRK10 leads to xylem

vessel collapse and activation of defence responses in Arabidopsis. *Journal of experimental botany*, 74(10), 3104.

Liao Y, et al. (2023) cellCounts: an R function for quantifying 10x Chromium single-cell RNA sequencing data. *Bioinformatics (Oxford, England)*, 39(7).

Hein LE, et al. (2023) TGF- $\beta$ 1 activates neutrophil signaling and gene expression but not migration. *PloS one*, 18(9), e0290886.

Bohuslavova R, et al. (2023) NEUROD1 reinforces endocrine cell fate acquisition in pancreatic development. *Nature communications*, 14(1), 5554.

Sierra C, et al. (2023) The lncRNA Snhg11, a new candidate contributing to neurogenesis, plasticity and memory deficits in Down syndrome. *Research square*.

Touray AO, et al. (2023) PI(3,4,5)P3 allosteric regulation of repressor activator protein 1 controls antigenic variation in trypanosomes. *eLife*, 12.

Gopal RK, et al. (2023) Effectors Enabling Adaptation to Mitochondrial Complex I Loss in Hürthle Cell Carcinoma. *Cancer discovery*, 13(8), 1904.

Das BK, et al. (2023) Single-cell dissection of Merkel cell carcinoma heterogeneity unveils transcriptomic plasticity and therapeutic vulnerabilities. *Cell reports. Medicine*, 4(7), 101101.

Sen K, et al. (2023) NCoR1 controls immune tolerance in conventional dendritic cells by fine-tuning glycolysis and fatty acid oxidation. *Redox biology*, 59, 102575.

Richard AC, et al. (2023) Cytotoxic T lymphocytes require transcription for infiltration but not target cell lysis. *EMBO reports*, 24(11), e57653.

de Mattos CD, et al. (2023) Polyamines and linear DNA mediate bacterial threat assessment of bacteriophage infection. *Proceedings of the National Academy of Sciences of the United States of America*, 120(9), e2216430120.

Elberling F, et al. (2023) Sex Differences in Long-term Outcome of Prenatal Exposure to Excess Glucocorticoids-Implications for Development of Psychiatric Disorders. *Molecular neurobiology*, 60(12), 7346.

Kang JY, et al. (2023) Polysome Profiling in Adult Mouse Testes. *Bio-protocol*, 13(11), e4686.