

Resource Summary Report

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sSeq

RRID:SCR_001719

Type: Tool

Proper Citation

sSeq (RRID:SCR_001719)

Resource Information

URL: <http://bioconductor.org/packages/2.13/bioc/html/sSeq.html>

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Description: Software package to discover the genes that are differentially expressed between two conditions in RNA-seq experiments. Gene expression is measured in counts of transcripts and modeled with the Negative Binomial (NB) distribution using a shrinkage approach for dispersion estimation. The method of moment (MM) estimates for dispersion are shrunk towards an estimated target, which minimizes the average squared difference between the shrinkage estimates and the initial estimates. The exact per-gene probability under the NB model is calculated, and used to test the hypothesis that the expected expression of a gene in two conditions identically follow a NB distribution.

Abbreviations: sSeq

Synonyms: sSeq - Shrinkage estimation of dispersion in Negative Binomial models for RNA-seq experiments with small sample size

Resource Type: software resource

Defining Citation: [PMID:23589650](#)

Keywords: rna-seq, differential expression

Availability: Free, Available for download, Freely available

Resource Name: sSeq

Resource ID: SCR_001719

Alternate IDs: OMICS_01962

License: GNU General Public License, v3 or newer

Record Creation Time: 20220129T080209+0000

Record Last Update: 20260725T190508+0000

Ratings and Alerts

No rating or validation information has been found for sSeq.

No alerts have been found for sSeq.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 47 mentions in open access literature.

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

Jin C, et al. (2025) Towards Quality Assessment for Arbitrary Translational 6DoF Video: Subjective Quality Database and Objective Assessment Metric. Entropy (Basel, Switzerland), 27(1).

Lynch AT, et al. (2025) HAND1 level controls the specification of multipotent cardiac and extraembryonic progenitors from human pluripotent stem cells. The EMBO journal, 44(9), 2541.

Zhang H, et al. (2025) Kölliker's Organ Functions as a Developmental Hub in Mouse Cochlea Regulating Spiral Limbus and Tectorial Membrane Development. The Journal of neuroscience : the official journal of the Society for Neuroscience, 45(13).

Odell AV, et al. (2025) EGFR-STAT1 pathway drives fibrosis initiation in fibroinflammatory skin diseases. Nature communications, 16(1), 8969.

Lhotska H, et al. (2025) Validating a clinically based MS-MLPA threshold through comparison with Sanger sequencing in glioblastoma patients. Clinical epigenetics, 17(1), 16.

Beernaert B, et al. (2025) Chromosomal instability shapes the tumor microenvironment of esophageal adenocarcinoma via a cGAS-chemokine-myeloid axis. bioRxiv : the preprint server for biology.

Jayaraj K, et al. (2025) Spatial Transcriptomic Analysis Reveals HDAC Inhibition Modulates Microglial Dynamics to Protect Against Ischemic Stroke in Mice. Glia, 73(9), 1817.

Das A, et al. (2024) Identifying immune signatures of sepsis to increase diagnostic accuracy in very preterm babies. Nature communications, 15(1), 388.

Uroose W, et al. (2024) Urdu translation and cross-cultural validation of the stroke self-efficacy questionnaire. *BMC neurology*, 24(1), 225.

Hu Q, et al. (2024) Single-cell sequencing reveals transcriptional dynamics regulated by ER? in mouse ovaries. *PloS one*, 19(11), e0313867.

Ma Y, et al. (2024) Kernel Bayesian nonlinear matrix factorization based on variational inference for human-virus protein-protein interaction prediction. *Scientific reports*, 14(1), 5693.

Lo SHS, et al. (2023) Health Professional- and Volunteer-partnered Self-management Support (COMBO-KEY) to Promote Self-efficacy and Self-management Behaviors in People with Stroke: A Randomized Controlled Trial. *Annals of behavioral medicine : a publication of the Society of Behavioral Medicine*, 57(10), 866.

Canela VH, et al. (2023) A spatially anchored transcriptomic atlas of the human kidney papilla identifies significant immune injury in patients with stone disease. *Nature communications*, 14(1), 4140.

Wang W, et al. (2023) Effectiveness of a smartphone-enabled dyadic self-care programme (SDSCP) for stroke survivors and caregivers: study protocol for a randomised controlled trial. *BMJ open*, 13(9), e073016.

Helty H, et al. (2023) Should Patients Be Confident in Their Efficacy in Improving Their Functional Abilities After a Stroke? *Cureus*, 15(12), e51105.

Karri K, et al. (2023) TCDD dysregulation of lncRNA expression, liver zonation and intercellular communication across the liver lobule. *bioRxiv : the preprint server for biology*.

Xiong L, et al. (2023) Direct androgen receptor regulation of sexually dimorphic gene expression in the mammalian kidney. *bioRxiv : the preprint server for biology*.

Odell ID, et al. (2023) IL-6 trans-signaling in a humanized mouse model of scleroderma. *Proceedings of the National Academy of Sciences of the United States of America*, 120(37), e2306965120.

Johar MN, et al. (2022) The effect of game-based in comparison to conventional circuit exercise on functions, motivation level, self-efficacy and quality of life among stroke survivors. *Medicine*, 101(2), e28580.

Manning KY, et al. (2022) Prenatal Maternal Distress During the COVID-19 Pandemic and Associations With Infant Brain Connectivity. *Biological psychiatry*, 92(9), 701.