

Resource Summary Report

Generated by [NIF](#) on Jul 30, 2026

[tradeSeq](#)

RRID:SCR_019238

Type: Tool

Proper Citation

tradeSeq (RRID:SCR_019238)

Resource Information

URL: <https://github.com/statOmics/tradeSeq>

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Description: Software tool as suite of tests for identifying dynamic temporal gene regulation using single cell RNA-seq data. Trajectory based differential expression analysis for sequencing data.

Synonyms: TRAjectory-based Differential Expression analysis for SEQuencing data

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

Keywords: Dynamic temporal gene regulation, gene regulation identifying, gene regulation, single cell RNA-seq data, differential expression analysis, sequencing data, bio.tools

Availability: Free, Available for download, Freely available

Resource Name: tradeSeq

Resource ID: SCR_019238

Alternate IDs: biotools:tradesseq

Alternate URLs: <https://bioconductor.org/packages/tradeSeq/>, <https://bio.tools/tradeseq>

License: MIT

Record Creation Time: 20220129T080344+0000

Record Last Update: 20260731T043034+0000

Ratings and Alerts

No rating or validation information has been found for tradeSeq.

No alerts have been found for tradeSeq.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 35 mentions in open access literature.

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

Kurz L, et al. (2026) A common progenitor gives rise to fibroblastic reticular cells and vascular smooth muscle cells in murine lymph nodes. The Journal of experimental medicine, 223(2).

Azami T, et al. (2025) STAT3 signaling enhances tissue expansion during postimplantation mouse development. Cell reports, 44(4), 115506.

Grimes JM, et al. (2025) Oncolytic reprogramming of tumor microenvironment shapes CD4 T-cell memory via the IL6ra-Bcl6 axis for targeted control of glioblastoma. Nature communications, 16(1), 1095.

Ladd B, et al. (2025) Heterogeneity in an adeno-associated virus transfection-based production process limits the production efficiency. Scientific reports, 15(1), 38459.

Kgoadi K, et al. (2025) Alveolar macrophages from persons with HIV mount impaired TNF signaling networks to M. tuberculosis infection. Nature communications, 16(1), 2397.

Li Y, et al. (2025) Single-cell and spatial analysis reveals the interaction between ITLN1+ foam cells and SPP1+ macrophages in atherosclerosis. Frontiers in cardiovascular medicine, 12, 1510082.

Matern MS, et al. (2025) A developmental atlas of mouse vestibular-like inner ear organoids. iScience, 28(2), 111817.

Hu S, et al. (2025) MMP9^{High} Neutrophils are Critical Mediators of Neutrophil Extracellular Traps Formation and Myocardial Ischemia/Reperfusion Injury. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 12(21), e2415205.

Price PD, et al. (2025) Single-cell consequences of X-linked meiotic drive in stalk-eyed flies. PLoS genetics, 21(9), e1011816.

Aisenberg WH, et al. (2025) Direct microglia replacement reveals pathologic and therapeutic contributions of brain macrophages to a monogenic neurological disease. Immunity, 58(5), 1254.

Risley CA, et al. (2025) Transcription factor T-bet regulates the maintenance and differentiation potential of lymph node and lung effector memory B cell subsets. *Immunity*, 58(7), 1706.

Carrelha J, et al. (2024) Alternative platelet differentiation pathways initiated by nonhierarchically related hematopoietic stem cells. *Nature immunology*, 25(6), 1007.

Niu Y, et al. (2024) Single-cell total-RNA profiling unveils regulatory hubs of transcription factors. *Nature communications*, 15(1), 5941.

Ismaeel A, et al. (2024) Division-Independent Differentiation of Muscle Stem Cells During a Growth Stimulus. *Stem cells (Dayton, Ohio)*, 42(3), 266.

Vo DN, et al. (2024) A temporal developmental map separates human NK cells from noncytotoxic ILCs through clonal and single-cell analysis. *Blood advances*, 8(11), 2933.

Fetit R, et al. (2024) Characterizing Neutrophil Subtypes in Cancer Using scRNA Sequencing Demonstrates the Importance of IL1 β /CXCR2 Axis in Generation of Metastasis-specific Neutrophils. *Cancer research communications*, 4(2), 588.

Li H, et al. (2023) Immunologic barriers in liver transplantation: a single-cell analysis of the role of mesenchymal stem cells. *Frontiers in immunology*, 14, 1274982.

Vanneste D, et al. (2023) MafB-restricted local monocyte proliferation precedes lung interstitial macrophage differentiation. *Nature immunology*, 24(5), 827.

Bazyari MJ, et al. (2023) Deciphering colorectal cancer progression features and prognostic signature by single-cell RNA sequencing pseudotime trajectory analysis. *Biochemistry and biophysics reports*, 35, 101491.

Cappuyns S, et al. (2023) PD-1- CD45RA⁺ effector-memory CD8 T cells and CXCL10⁺ macrophages are associated with response to atezolizumab plus bevacizumab in advanced hepatocellular carcinoma. *Nature communications*, 14(1), 7825.