

Resource Summary Report

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MAST

RRID:SCR_016340

Type: Tool

Proper Citation

MAST (RRID:SCR_016340)

Resource Information

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

Proper Citation: MAST (RRID:SCR_016340)

Description: Software as an open source package for assessing transcriptional changes and characterizing heterogeneity in single-cell RNA sequencing data.

Abbreviations: MAST

Synonyms: Model based Analysis of Single Cell Transcriptomics

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

Defining Citation: [DOI:10.5281/zenodo.18539](https://doi.org/10.5281/zenodo.18539)

Keywords: model, based, analysis, single, cell, transcriptomics, RNA, sequencing, data

Funding: Bill and Melinda Gates Foundation OPP1032317;
NIBIB R01 EB008400;
NIH DP2 DE023321

Availability: Free, Available for download, Freely available

Resource Name: MAST

Resource ID: SCR_016340

Alternate URLs: <https://github.com/RGLab/MAST/>

License: GPL

Record Creation Time: 20220129T080330+0000

Record Last Update: 20260905T132807+0000

Ratings and Alerts

No rating or validation information has been found for MAST.

No alerts have been found for MAST.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 106 mentions in open access literature.

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

Jiménez-Sánchez A, et al. (2026) Transcriptomic Plasticity Is a Hallmark of Metastatic Pancreatic Cancer. *Cancer research*, 86(7), 1769.

Kim YM, et al. (2026) Engineering NK and T cells with metabolite-sensing receptors to target solid tumors. *Nature immunology*, 27(5), 1039.

Levan J, et al. (2026) Congenital cytomegalovirus infection drives oligoclonal expansion of cytotoxic ?? T cells from early fetal progenitors. *Journal of immunology (Baltimore, Md. : 1950)*, 215(6).

Raha S, et al. (2026) Myeloid AEG-1/MTDH drives inflammation and hepatocellular dysfunction in diet-induced steatohepatitis. *The Journal of biological chemistry*, 302(2), 111101.

Kroehling L, et al. (2026) A highly resolved integrated single-cell atlas of HPV-negative head and neck cancer. *Communications medicine*, 6(1).

Al-Eryani G, et al. (2026) Proteotranscriptomic Dissection of Breast Cancer T Cell States Identifies CD103+ Tfh-derived Cytotoxic Cells Linked to Immunotherapy Response. *Research square*.

Fritz L, et al. (2026) Differentiation-induced reduction in functional diversity restricts the ability of cytomegalovirus-specific CD8 T cells to eliminate virus-infected cells. *EBioMedicine*, 123, 106107.

Meloun A, et al. (2026) Atypical pericapillary Ly6G⁺Nur77⁺ macrophages initiate type-2 immune responses to allergens in the mouse lung. *Nature communications*, 17(1).

Simmons SK, et al. (2026) Experimental and computational methods for allelic imbalance analysis from single-nucleus RNA-seq data. *Genome biology*, 27(1).

Thienger P, et al. (2026) A Double-Negative Prostate Cancer Subtype Is Vulnerable to SWI/SNF-Targeting Degradable Molecules. *Cancer research*, 86(7), 1570.

Lobel L, et al. (2026) Dietary sulfur amino acids enhance anti-tumor immunity in colon cancer via an NKT cell-XCL1-cDC1 circuit. *Immunity*, 59(6), 1708.

Molè MA, et al. (2026) Modeling human embryo implantation in vitro. *Cell*, 189(1), 87.

Mao J, et al. (2026) ?-Space ST: A platform-agnostic method to identify cell states in spatial transcriptomics studies. *Cell reports methods*, 101483.

Fenoglio S, et al. (2026) Temporal control of sgRNA library activation unlocks large-scale in vivo CRISPR screens. *Cell reports methods*, 6(7), 101470.

Ramsey AC, et al. (2026) TGF- β signaling promotes astroglial activation and TDP-43 proteinopathy in organoid models of frontotemporal lobar degeneration. *The Journal of clinical investigation*, 136(14).

Nagel L, et al. (2026) Gene expression adaptation of metastases to their host tissue. *iScience*, 29(8), 116744.

Huang R, et al. (2025) Comparative single-cell transcriptomic profiling of patient-derived renal carcinoma cells in cellular and animal models of kidney cancer. *FEBS open bio*, 15(7), 1124.

Wen X, et al. (2025) Longitudinal single cell profiling of epitope specific memory CD4⁺ T cell responses to recombinant zoster vaccine. *Nature communications*, 16(1), 2332.

Ennis CS, et al. (2025) Plasma exosomes from individuals with type 2 diabetes drive breast cancer aggression in patient-derived organoids. *Communications biology*, 8(1), 1276.

Hu J, et al. (2025) Single-Cell Transcriptomics of Human Acute Myocardial Infarction Reveals Oxidative Stress-Associated Cardiomyocyte Subpopulations and Candidate Predictive Signatures. *Antioxidants (Basel, Switzerland)*, 14(12).