Resource Summary Report

Generated by NIF on Sep 15, 2026

Velocyto

RRID:SCR_018167
Type: Tool

Proper Citation

Velocyto (RRID:SCR_018167)

Resource Information

URL: http://velocyto.org/

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Description: Software package for analysis of expression dynamics in single cell RNA seq data. Enables estimations of RNA velocities of single cells by distinguishing unspliced and spliced mRNAs in standard single-cell RNA sequencing protocols. Estimates RNA velocity in single cell RNA sequencing datasets. RNA velocity estimation in Python or R.

Synonyms: velocyto.py, velocyto, velocyto.R

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

Keywords: Expression dynamic, single cell RNAseq data, data, RNAseq, RNA velocity, mRNA, RNAseq dataset, estimation RNA velocity

Availability: Free, Available for download, Freely available

Resource Name: Velocyto

Resource ID: SCR_018167

Alternate URLs: https://github.com/velocyto-team/velocyto.py, https://github.com/velocyto-team/velocyto.R

License: BSD 2-Clause "Simplified" License

Record Creation Time: 20220129T080339+0000

Record Last Update: 20260912T195858+0000

Ratings and Alerts

No rating or validation information has been found for Velocyto.

No alerts have been found for Velocyto.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 152 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF .

Baurès M, et al. (2026) Targeting pre-existing club-like cells in prostate cancer potentiates androgen deprivation therapy. EMBO molecular medicine, 18(3), 943.

Han Z, et al. (2026) Single-Nucleus Transcriptome Reveals Cellular Heterogeneity and Transcriptional Response to Heat Stress in Skeletal Muscle. Journal of cachexia, sarcopenia and muscle, 17(1), e70217.

Wang K, et al. (2026) Ontogeny Dictates Oncogenic Potential, Lineage Hierarchy, and Therapy Response in Pediatric Leukemia. Cancer discovery, 16(3), 541.

Liu P, et al. (2026) Spatiotemporal transcriptomic and metabolomic landscapes of wild soybean seed development reveal regulatory mechanisms of nutrient accumulation. Plant communications, 7(1), 101580.

Toropov AL, et al. (2026) The Role of Senescence in the Step-by-Step Development of Endometrial Cancer. International journal of molecular sciences, 27(5).

Shi H, et al. (2026) Chemotherapy-induced reactive myelopoiesis promotes expansion of immunosuppressive neutrophil-like monocytes in mice and humans. JCI insight, 11(10).

Li Z, et al. (2026) Stress-Induced Activation of Prolactin-NR4A1-Midkine Axis Exacerbates Skin Inflammation. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 13(5), e09679.

Xu X, et al. (2026) A Multistep Immune-Competent Genetically Engineered Mouse Model Reveals Phenotypic Plasticity in Uveal Melanoma. Cancer research, 86(15), 3666.

Jaiswal A, et al. (2026) Spatial transcriptomics reveals altered communities and drivers of aberrant epithelia and pro-fibrotic fibroblasts in interstitial lung diseases. Cell genomics, 6(3), 101066.

Kallio P, et al. (2025) A Multipotent PROX1+ Tumor Stem/Progenitor Cell Population Emerges during Intestinal Tumorigenesis and Mediates Radioresistance in Colorectal Cancer. Cancer research, 85(23), 4616.

Yu S, et al. (2025) Single-cell RNA sequencing uncovers cellular heterogeneity of granulosa cells and provides a signature for follicular development in chicken. Poultry science, 104(9), 105430.

Wang K, et al. (2025) Ontogeny Dictates Oncogenic Potential, Lineage Hierarchy, and Therapy Response in Pediatric Leukemia. bioRxiv : the preprint server for biology.

Hu S, et al. (2025) MMP9High Neutrophils are Critical Mediators of Neutrophil Extracellular Traps Formation and Myocardial Ischemia/Reperfusion Injury. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 12(21), e2415205.

Jiang X, et al. (2025) Depletion of Effector Regulatory T Cells Associates with Major Response to Induction Dual Immune Checkpoint Blockade. Cancer discovery, 15(8), 1569.

Embaie BT, et al. (2025) Comparative Single-Cell Transcriptomics of Human Neuroblastoma and Preclinical Models Reveals Conservation of an Adrenergic Cell State. Cancer research, 85(6), 1015.

Zia S, et al. (2025) Age-impaired remyelination is associated with dysregulated microglial transitions. Nature communications, 16(1), 9951.

Xu G, et al. (2025) Unique Sertoli cell adaptations support enhanced spermatogenesis in chickens. Journal of animal science and biotechnology, 16(1), 170.

Murillo-Rincón AP, et al. (2025) Positional programs in early murine facial development and their role in human facial shape variability. Nature communications, 16(1), 10112.

Chen B, et al. (2025) Single-cell and spatial transcriptomics reveals an anti-tumor neutrophil subgroup in microwave thermochemotherapy-treated lip cancer. International journal of oral science, 17(1), 40.

Maimon T, et al. (2025) Unsupervised Machine Learning Reveals Temporal Components of Gene Expression in HeLa Cells Following Release from Cell Cycle Arrest. International journal of molecular sciences, 26(19).