Resource Summary Report

Generated by SPARC SAWG on Jul 29, 2026

CytoMAP

RRID:SCR_021227
Type: Tool

Proper Citation

CytoMAP (RRID:SCR_021227)

Resource Information

URL: https://gitlab.com/gernerlab/cytomap/-/wikis/home

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Description: Software tool as spatial analysis software for whole tissue sections.Utilizes information on cell type and position to phenotype local neighborhoods and reveal how their spatial distribution leads to generation of global tissue architecture.Used to make advanced data analytic techniques accessible for single cell data with position information.

Synonyms: Histo-Cytometric Multidimensional Analysis Pipeline

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

Defining Citation: PMID:32320656

Keywords: Histo cytometric multidimensional, analysis pipeline, whole tissue sections, spatial analysis, single cell data with position information, phenotype local neighborhoods, global tissue architecture

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NIAID T32 AI10667;
NIGMS T32 GM007270;
NICHD T32 HD007233;
NSF DGE 1762114

Availability: Free, Available for download, Freely available

Resource Name: CytoMAP

Resource ID: SCR_021227

Record Creation Time: 20220129T080354+0000

Record Last Update: 20260729T044508+0000

Ratings and Alerts

No rating or validation information has been found for CytoMAP.

No alerts have been found for CytoMAP.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 22 mentions in open access literature.

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

Liu H, et al. (2025) Systematic Characterisation and Analysis of Lysyl Oxidase Family Members as Drivers of Tumour Progression and Multiple Drug Resistance. Journal of cellular and molecular medicine, 29(7), e70536.

Iwane K, et al. (2025) Targeting fibroblast derived thrombospondin 2 disrupts an immune-exclusionary environment at the tumor front in colorectal cancer. Nature communications, 16(1), 11590.

Rios-Jimenez E, et al. (2025) BEHAV3D Tumor Profiler to map heterogeneous cancer cell behavior in the tumor microenvironment. eLife, 13.

Santinon F, et al. (2025) Lack of phospho-eIF4E worsens experimental colitis by inhibiting Treg suppressive activity. Journal of inflammation (London, England), 22(1), 48.

Pisu D, et al. (2025) Spatially-distinct programming of macrophage diversity within the granulomas of Mycobacterium tuberculosis infected nonhuman primates. bioRxiv : the preprint server for biology.

Piot C, et al. (2025) Spatial Organisation of Tumour cDC1 States Correlates with Effector and Stem-Like CD8+ T Cells Location. European journal of immunology, 55(8), e70011.

Wess M, et al. (2025) Versatile roles of annexin A4 in clear cell renal cell carcinoma: Impact on membrane repair, transcriptional signatures, and composition of the tumor microenvironment. iScience, 28(4), 112198.

Papadopoulos AO, et al. (2025) Spatial regulation of CD8+ T cells at the HLA-E-NKG2A axis drives HIV persistence in lymph node B cell follicles. Cell reports, 44(9), 116181.

Gern BH, et al. (2024) CD4-mediated immunity shapes neutrophil-driven tuberculous pathology. bioRxiv : the preprint server for biology.

Hollands CG, et al. (2024) Identification of cells of leukemic stem cell origin with non-canonical regenerative properties. Cell reports. Medicine, 5(4), 101485.

Jasiewicz NE, et al. (2024) In situ-crosslinked Zippersomes enhance cardiac repair by increasing accumulation and retention. Bioengineering & translational medicine, 9(6), e10697.

De León-Rodríguez SG, et al. (2024) TCF1-positive and TCF1-negative TRM CD8 T cell subsets and cDC1s orchestrate melanoma protection and immunotherapy response. Journal for immunotherapy of cancer, 12(7).

Tanoue K, et al. (2024) Spatial dynamics of CD39+CD8+ exhausted T cell reveal tertiary lymphoid structures-mediated response to PD-1 blockade in esophageal cancer. Nature communications, 15(1), 9033.

Oyoshi H, et al. (2023) Comprehensive single-cell analysis demonstrates radiotherapy-induced infiltration of macrophages expressing immunosuppressive genes into tumor in esophageal squamous cell carcinoma. Science advances, 9(50), eadh9069.

Barreby E, et al. (2023) Human resident liver myeloid cells protect against metabolic stress in obesity. Nature metabolism, 5(7), 1188.

Pea A, et al. (2023) Characterization and digital spatial deconvolution of the immune microenvironment of intraductal oncocytic papillary neoplasms (IOPN) of the pancreas. Virchows Archiv : an international journal of pathology, 483(2), 157.

Shekarian T, et al. (2022) Immunotherapy of glioblastoma explants induces interferon-? responses and spatial immune cell rearrangements in tumor center, but not periphery. Science advances, 8(26), eabn9440.

Maus RLG, et al. (2022) Resolving the heterogeneous tumor-centric cellular neighborhood through multiplexed, spatial paracrine interactions in the setting of immune checkpoint blockade. Cancer research communications, 2(2), 78.

Schlaeppi A, et al. (2022) Meeting in the Middle: Towards Successful Multidisciplinary Bioimage Analysis Collaboration. Frontiers in bioinformatics, 2.

Dai XQ, et al. (2022) Heterogenous impairment of ? cell function in type 2 diabetes is linked to cell maturation state. Cell metabolism, 34(2), 256.