Resource Summary Report

Generated by dkNET on May 18, 2025

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, software toolkit, data analytics software, data analysis software, data processing software, software resource

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

Funding: NIAID R01 AI134713;

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NIAID U19 AI135976;

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: 20250517T060430+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 14 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>dkNET</u>.

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.

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.

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).

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.

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.

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

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.

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.

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.

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

Lê Cao KA, et al. (2021) Community-wide hackathons to identify central themes in single-cell multi-omics. Genome biology, 22(1), 220.

Stoltzfus CR, et al. (2020) CytoMAP: A Spatial Analysis Toolbox Reveals Features of Myeloid Cell Organization in Lymphoid Tissues. Cell reports, 31(3), 107523.