

Resource Summary Report

Generated by PRECISE-TBI on Jul 29, 2026

DeepCell

RRID:SCR_022197

Type: Tool

Proper Citation

DeepCell (RRID:SCR_022197)

Resource Information

URL: <https://vanvalen.github.io/about/>

Proper Citation: DeepCell (RRID:SCR_022197)

Description: Software for segmenting individual cells in microscopy images using deep learning. Cell segmentation software.

Synonyms: Deepcell

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

Defining Citation: [DOI:10.1371/journal.pcbi.1005177](https://doi.org/10.1371/journal.pcbi.1005177)

Keywords: segmenting individual cells, microscopy image, cell segmentation

Funding: Paul Allen Family Foundation ;
NIGMS F32 GM119319;
NIGMS P50 GM107615;
NLM DP1 LM01150

Availability: Free, Available for download, Freely available

Resource Name: DeepCell

Resource ID: SCR_022197

Record Creation Time: 20220427T191217+0000

Record Last Update: 20260729T044537+0000

Ratings and Alerts

No rating or validation information has been found for DeepCell.

No alerts have been found for DeepCell.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 10 mentions in open access literature.

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

Lee Y, et al. (2025) Segmentation aware probabilistic phenotyping of single-cell spatial protein expression data. Nature communications, 16(1), 389.

Chung DC, et al. (2025) CD103+CD56+ ILCs Are Associated with an Altered CD8+ T-cell Profile within the Tumor Microenvironment. Cancer immunology research, 13(4), 527.

Shi C, et al. (2025) CellBinDB: a large-scale multimodal annotated dataset for cell segmentation with benchmarking of universal models. GigaScience, 14.

Yoffe L, et al. (2025) Acquisition of discrete immune suppressive barriers contributes to the initiation and progression of preinvasive to invasive human lung cancer. bioRxiv : the preprint server for biology.

Lacinski RA, et al. (2024) Spatial multiplexed immunofluorescence analysis reveals coordinated cellular networks associated with overall survival in metastatic osteosarcoma. Bone research, 12(1), 55.

Ohara K, et al. (2024) The evolution of metastatic upper tract urothelial carcinoma through genomic-transcriptomic and single-cell protein markers analysis. Nature communications, 15(1), 2009.

Santamaria-Martinez A, et al. (2024) Development of patient-derived lymphomoids with preserved tumor architecture for lymphoma therapy screening. Nature communications, 15(1), 10650.

Heussner RT, et al. (2023) Quantitative image analysis pipeline for detecting circulating hybrid cells in immunofluorescence images with human-level accuracy. bioRxiv : the preprint server for biology.

Weeratunga P, et al. (2023) Single cell spatial analysis reveals inflammatory foci of immature neutrophil and CD8 T cells in COVID-19 lungs. Nature communications, 14(1), 7216.

Wen C, et al. (2021) 3DeeCellTracker, a deep learning-based pipeline for segmenting and tracking cells in 3D time lapse images. eLife, 10.