Resource Summary Report

Generated by NIF on Apr 8, 2025

CellProfiler Image Analysis Software

RRID:SCR_007358
Type: Tool

Proper Citation

CellProfiler Image Analysis Software (RRID:SCR_007358)

Resource Information

URL: http://cellprofiler.org

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Description: Software tool to enable biologists without training in computer vision or programming to quantitatively measure phenotypes from thousands of images automatically. It counts cells and also measures the size, shape, intensity and texture of every cell (and every labeled subcellular compartment) in every image. It was designed for high throughput screening but can perform automated image analysis for images from time-lapse movies and low-throughput experiments. CellProfiler has an increasing number of algorithms to identify and measure properties of neuronal cell types.

Synonyms: Cell Profiler, CellProfiler - cell image analysis software

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

Defining Citation: PMID:21349861, PMID:17076895, PMID:19014601, PMID:19188593

Keywords: high-throughput, high content imaging, software, image, cell, phenotype, measurement, subcellular, intensity, size, shape, analysis, algorithm

Funding: NIGMS R01 GM089652;
NIGMS RC2 GM092519;
NHGRI RL1 HG004671

Availability: Free, Available for download, Freely available

Resource Name: CellProfiler Image Analysis Software

Resource ID: SCR_007358

Alternate IDs: SCR_010649, nlx_66812, nif-0000-00280

Alternate URLs: https://sources.debian.org/src/cellprofiler/

License: BSD License

Record Creation Time: 20220129T080241+0000

Record Last Update: 20250407T215638+0000

Ratings and Alerts

No rating or validation information has been found for CellProfiler Image Analysis Software.

No alerts have been found for CellProfiler Image Analysis Software.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 2961 mentions in open access literature.

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

Kartnig F, et al. (2025) Ex vivo imaging-based high content phenotyping of patients with rheumatoid arthritis. EBioMedicine, 111, 105522.

Renninger KA, et al. (2025) The rise of CLAVATA: evidence for CLAVATA3 and WOX signaling in the fern gametophyte. The Plant journal : for cell and molecular biology, 121(2), e17207.

Wang X, et al. (2025) IDH-mutant glioma risk stratification via whole slide images: Identifying pathological feature associations. iScience, 28(1), 111605.

Ligasová A, et al. (2025) The kinetics of uracil-N-glycosylase distribution inside replication foci. Scientific reports, 15(1), 3026.

Faust K, et al. (2025) PHARAOH: A collaborative crowdsourcing platform for phenotyping and regional analysis of histology. Nature communications, 16(1), 742.

Linthorst NA, et al. (2025) Amelioration of a von Willebrand disease type 2B phenotype in vivo upon treatment with allele-selective siRNAs. Blood advances, 9(2), 310.

Zhao Y, et al. (2025) VISTA-induced tumor suppression by a four amino acid intracellular motif. bioRxiv : the preprint server for biology.

Hunt LC, et al. (2025) The ubiquitin-conjugating enzyme UBE2D maintains a youthful proteome and ensures protein quality control during aging by sustaining proteasome activity. PLoS biology, 23(1), e3002998.

Demchenko A, et al. (2025) Human Induced Lung Organoids: A Promising Tool for Cystic Fibrosis Drug Screening. International journal of molecular sciences, 26(2).

Moorman A, et al. (2025) Progressive plasticity during colorectal cancer metastasis. Nature, 637(8047), 947.

Lengyel M, et al. (2025) Zymogen granule protein 16B (ZG16B) is a druggable epigenetic target to modulate the mammary extracellular matrix. Cancer science, 116(1), 81.

Kuett L, et al. (2025) Distant Metastases of Breast Cancer Resemble Primary Tumors in Cancer Cell Composition but Differ in Immune Cell Phenotypes. Cancer research, 85(1), 15.

Lee HS, et al. (2025) Extrusion-Based Printing of Myoblast-Loaded Fibrin Microthreads to Induce Myogenesis. Journal of functional biomaterials, 16(1).

Chatterjee P, et al. (2025) Quorum sensing mediates morphology and motility transitions in the model archaeon Haloferax volcanii. bioRxiv : the preprint server for biology.

Coquel F, et al. (2025) Synergistic effect of inhibiting CHK2 and DNA replication on cancer cell growth. eLife, 13.

Jani C, et al. (2025) VPS18 contributes to phagosome membrane integrity in Mycobacterium tuberculosis-infected macrophages. Science advances, 11(5), eadr6166.

Jiang X, et al. (2025) Nuclear N-WASP Induces Actin Polymerization in the Nucleus with Cortactin as an Essential Factor. Cells, 14(1).

Butkovich LM, et al. (2025) Action inflexibility and compulsive-like behavior accompany neurobiological alterations in the anterior orbitofrontal cortex and associated striatal nuclei. Scientific reports, 15(1), 1863.

Rees A, et al. (2025) Screening Methods to Discover the FDA-Approved Cancer Drug Encorafenib as Optimally Selective for Metallothionein Gene Loss Ovarian Cancer. Genes, 16(1).

Bräuer S, et al. (2025) Recursive seed amplification detects distinct ?-synuclein strains in cerebrospinal fluid of patients with Parkinson's disease. Acta neuropathologica communications, 13(1), 13.