

Resource Summary Report

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Harmony

RRID:SCR_022206

Type: Tool

Proper Citation

Harmony (RRID:SCR_022206)

Resource Information

URL: <https://github.com/immunogenomics/harmony>

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Description: Software R package to project cells into shared embedding in which cells group by cell type rather than dataset specific conditions. Harmony simultaneously accounts for multiple experimental and biological factors. Used for integration of single cell data.

Synonyms: Harmony for immunogenomics

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

Defining Citation: [PMID:31740819](#)

Keywords: cells grouping, cell type, experimental factors, biological factors, single cell data integration

Funding: NIAID U19 AI111224;
NIH R01 AR063759;
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NIH UH2 AR067677

Availability: Free, Available for download, Freely available

Resource Name: Harmony

Resource ID: SCR_022206

License: GNU GPL

Record Creation Time: 20220427T191217+0000

Record Last Update: 20260905T132952+0000

Ratings and Alerts

No rating or validation information has been found for Harmony.

No alerts have been found for Harmony.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 250 mentions in open access literature.

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

Rosenbaum E, et al. (2026) Tumor and Immune Dynamics Following Sequential CDK4/6 and PD-1 Inhibition: Results from a Phase 2 Study in Dedifferentiated Liposarcoma. Cancer research communications, 6(2), 437.

Mearelli M, et al. (2026) C9orf72 Repeat Expansion Induces Metabolic Dysfunction in Human iPSC-Derived Microglia and Modulates Glial-Neuronal Crosstalk. Glia, 74(1), e70080.

Maeda M, et al. (2026) CRISPR screen of human pancreatic cancer xenografts identifies a KLF5 proliferation vulnerability through epigenetic modifiers NCAPD2 and MTHFD1. Molecular cancer, 25(1).

Xia Z, et al. (2026) PI3K and MAPK Signaling Nodes Serve as Divergent Drivers of Phenotypic Plasticity in Cancer-Associated Fibroblasts in Colorectal Cancer. Cancer research, 86(12), 3040.

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).

Guo Z, et al. (2026) Integrative profiling of lactylation reveals prognostic biomarkers and an immunosuppressive niche in acute myeloid leukemia. Frontiers in immunology, 17, 1765979.

Pan D, et al. (2026) TGF- β -induced fibrotic scar formation limits recovery of spinal cord injury. Bone research, 14(1).

Ma J, et al. (2026) Single-cell spatial analysis stratifies lung adenocarcinoma with rare actionable mutations and reveals immune-modulatory cellular crosstalk. Cell reports. Medicine, 7(5), 102760.

Wu S, et al. (2026) Smoking promotes colorectal cancer via the CKAP2L/AREG axis. International journal of oncology, 68(5).

Liu Q, et al. (2026) LINC01963 promotes pancreatic ductal adenocarcinoma proliferation via METTL3/IGF2BP2 axis-mediated m⁶A modification of c-Myc. *Journal of experimental & clinical cancer research* : CR, 45(1).

Simmons SK, et al. (2026) Experimental and computational methods for allelic imbalance analysis from single-nucleus RNA-seq data. *Genome biology*, 27(1).

Bui TM, et al. (2026) Identification of cycling regulatory T cell precursors as conductors of immune escape during breast carcinoma progression. *Cancer cell*, 44(6), 1179.

Yang L, et al. (2026) TEAD4 and RXRA Regulate the Function of Nucleus Pulposus Cells in Intervertebral Disc Degeneration Via the TNF- α /NF- κ B Pathway: An Integrated Analysis of Single-Cell RNA-Seq, Bulk RNA-Seq, and In Vitro Validation. *Applied biochemistry and biotechnology*, 198(3), 1939.

Wang Y, et al. (2026) Midkine Overexpression Promotes Functional Recovery After Spinal Cord Injury by Enhancing Microglial Efferocytosis Via LRP-1. *CNS neuroscience & therapeutics*, 32(3), e70841.

Chen F, et al. (2026) CCL3+ Neutrophil Signature Predicts Response to Neoadjuvant Toripalimab plus Chemotherapy in Patients with Hypopharyngeal Squamous Cell Carcinoma: A Phase II Trial. *Clinical cancer research : an official journal of the American Association for Cancer Research*, 32(11), 2166.

Zhang MS, et al. (2026) BCAT1-dependent HIF-1 α stabilization is a targetable metabolic vulnerability in hepatocellular carcinoma. *Cell reports. Medicine*, 7(5), 102784.

Kardian AS, et al. (2026) Dominant clones leverage developmental epigenomic states to drive ependymoma. *Nature*, 652(8111), 1027.

Sun S, et al. (2026) Single-Nucleus RNA-Seq Reveals Neuroprotective Effects of Acupuncture in Chronic Migraine Through Modulation of Glial Subtypes. *CNS neuroscience & therapeutics*, 32(6), e70981.

López-Fuentes E, et al. (2026) Epigenetic and Transcriptional Programs Define Osteosarcoma Subtypes and Establish Targetable Vulnerabilities. *Cancer discovery*, 16(2), 296.

Yu D, et al. (2026) Single-cell atlas of hepatitis C virus inoculated tree shrew liver reveals immune activation, metabolic reprogramming, and persistent inflammation. *EBioMedicine*, 123, 106080.