

Resource Summary Report

Generated by [PRECISE-TBI](#) on Jul 29, 2026

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

Defining Citation: [PMID:31740819](#)

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

Funding: NIAID U19 AI111224;
NIH R01 AR063759;
NIH UH2 AR067677;
NIH T32 AR007530

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: 20260729T044538+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 171 mentions in open access literature.

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

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.

Jani S, et al. (2026) Circulating Neoantigen- and Viral Oncoprotein-Specific CD8+ T Cells Share a Transcriptional Signature. *Cancer immunology research*, 14(1), 22.

Meghdadi B, et al. (2026) Digital twins for in vivo metabolic flux estimations in patients with brain cancer. *Cell metabolism*, 38(1), 228.

Allen AM, et al. (2026) Differential neuronal survival defines a novel axis of sexual dimorphism in the *Drosophila* brain. *Cell genomics*, 101125.

Chen J, et al. (2025) Mutual regulation of microglia and astrocytes after Gas6 inhibits spinal cord injury. *Neural regeneration research*, 20(2), 557.

Hao W, et al. (2025) Scale-Up of Human Amniotic Epithelial Cells Through Regulation of Epithelial-Mesenchymal Plasticity Under Defined Conditions. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 12(11), e2408581.

Gao T, et al. (2025) Self-assembled patient-derived tumor-like cell clusters for personalized drug testing in diverse sarcomas. *Cell reports. Medicine*, 6(3), 101990.

Li Y, et al. (2025) Single-Cell Transcriptomic Landscape Deciphers Intratumoral Heterogeneity and Subtypes of Acral and Mucosal Melanomas. *Clinical cancer research : an official journal of the American Association for Cancer Research*, 31(12), 2495.

Muralidharan C, et al. (2025) Human Brain Cell-Type-Specific Aging Clocks Based on Single-Nuclei Transcriptomics. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 12(43), e06109.

Chiaro PD, et al. (2025) A framework to mine laser microdissection-based omics data and uncover regulators of pancreatic cancer heterogeneity. *GigaScience*, 14.

Camard L, et al. (2025) IL-23 tunes inflammatory functions of human mucosal-associated invariant T cells. *iScience*, 28(2), 111898.

Arya A, et al. (2025) Navigating single-cell RNA-sequencing: protocols, tools, databases, and applications. *Genomics & informatics*, 23(1), 13.

Mu H, et al. (2025) Methionine intervention induces PD-L1 expression to enhance the immune checkpoint therapy response in MTAP-deleted osteosarcoma. *Cell reports. Medicine*, 6(3), 101977.

Messingschlager M, et al. (2025) DNA methylation changes during acute COVID-19 are associated with long-term transcriptional dysregulation in patients' airway epithelial cells. *EMBO molecular medicine*, 17(5), 923.

Wang J, et al. (2025) The single-cell transcription reveals the aberrant differentiation trajectory of chondrocytes in the intervertebral disc for congenital scoliosis. *iScience*, 28(6), 112608.

Wang H, et al. (2025) Phenotypic plasticity and increased infiltration of peripheral blood-derived TREM1+ mono-macrophages following radiotherapy in rectal cancer. *Cell reports. Medicine*, 6(1), 101887.

Jacobs BM, et al. (2025) Single-cell analysis of cerebrospinal fluid reveals common features of neuroinflammation. *Cell reports. Medicine*, 6(1), 101733.

You JP, et al. (2025) Single nucleus RNA-seq reveals the process from onset to chronic kidney disease in IgA nephropathy. *Scientific reports*, 15(1), 22780.

Huang R, et al. (2025) Comparative single-cell transcriptomic profiling of patient-derived renal carcinoma cells in cellular and animal models of kidney cancer. *FEBS open bio*, 15(7), 1124.

Feleke M, et al. (2025) Single-Cell Transcriptome Analyses of Four Pain Related Genes in Osteosarcoma. *Cancer informatics*, 24, 11769351251331508.