

Resource Summary Report

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[fgsea](#)

RRID:SCR_020938

Type: Tool

Proper Citation

fgsea (RRID:SCR_020938)

Resource Information

URL: <https://bioconductor.org/packages/fgsea/>

Proper Citation: fgsea (RRID:SCR_020938)

Description: Software R package for fast preranked gene set enrichment analysis. Allows to make more permutations and get more fine grained p-values, which allows to use accurate standard approaches to multiple hypothesis correction.

Synonyms: fast gene set enrichment analysis, Fast Gene Set Enrichment Analysis, FGSEA

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

Defining Citation: [DOI:10.1101/060012](https://doi.org/10.1101/060012)

Keywords: Gene set enrichment analysis, preranked gene set, multiple hypothesis correction, bio.tools

Availability: Free, Available for download, Freely available

Resource Name: fgsea

Resource ID: SCR_020938

Alternate IDs: biotools:fgsea

Alternate URLs: <https://github.com/ctlab/fgsea/>, <https://bio.tools/fgsea>

License: MIT + file license

Record Creation Time: 20220129T080353+0000

Record Last Update: 20260731T043038+0000

Ratings and Alerts

No rating or validation information has been found for fgsea.

No alerts have been found for fgsea.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 185 mentions in open access literature.

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

Lasse Opsahl EL, et al. (2026) Fibroblast STAT3 Activation Drives Organ-Specific Premetastatic Niche Formation. Cancer research, 86(1), 22.

Dunn LN, et al. (2026) Altered hepatic metabolism in Down syndrome. Cell reports, 45(1), 116835.

Egea-Rodriguez S, et al. (2025) RECQL4 affects MHC class II-mediated signalling and favours an immune-evasive signature that limits response to immune checkpoint inhibitor therapy in patients with malignant melanoma. Clinical and translational medicine, 15(1), e70094.

Elias R, et al. (2025) Clear-Cell Renal Cell Carcinoma Molecular Subtypes Differ by African and European Genetic Similarity. Cancer research communications, 5(5), 743.

Agarwal G, et al. (2025) Inherited resilience to clonal hematopoiesis by modifying stem cell RNA regulation. bioRxiv : the preprint server for biology.

Hagan AS, et al. (2025) Triggering AHR resolves TGF- β 1 induced fibroblast activation and promotes AT1 cell regeneration in alveolar organoids. Communications biology, 8(1), 1025.

Catozzi A, et al. (2025) Functional characterization of the ATOH1 molecular subtype indicates a pro-metastatic role in small cell lung cancer. Cell reports, 44(5), 115603.

Shafer AM, et al. (2025) Immunocompetent Murine Models Recapitulate the Heterogeneous Tumor-Immune Microenvironment of Human Liposarcoma. Clinical cancer research : an official journal of the American Association for Cancer Research, 31(23), 5078.

Hoffmann J, et al. (2025) Steatohepatitis-induced vascular niche alterations promote melanoma metastasis. Cancer & metabolism, 13(1), 5.

Akagbosu CO, et al. (2025) Gut microbiome shifts in adolescents after sleeve gastrectomy with increased oral-associated taxa and pro-inflammatory potential. Gut microbes, 17(1),

2467833.

Do C, et al. (2025) Binding domain mutations provide insight into CTCF's relationship with chromatin and its contribution to gene regulation. *Cell genomics*, 5(4), 100813.

Ennis CS, et al. (2025) Plasma exosomes from individuals with type 2 diabetes drive breast cancer aggression in patient-derived organoids. *Communications biology*, 8(1), 1276.

Chandler TL, et al. (2025) Mechanisms of maternal antibody interference with rotavirus vaccination. *The EMBO journal*, 44(22), 6343.

Takashima S, et al. (2025) STAT1 regulates immune-mediated intestinal stem cell proliferation and epithelial regeneration. *Nature communications*, 16(1), 138.

Timilsina S, et al. (2025) Epigenetic silencing of DNA sensing pathway by FOXM1 blocks stress ligand-dependent antitumor immunity and immune memory. *Nature communications*, 16(1), 3967.

Van Nerum K, et al. (2025) α -Ketoglutarate promotes trophectoderm induction and maturation from naive human embryonic stem cells. *Nature cell biology*, 27(5), 749.

Labaf M, et al. (2025) Heterogeneous Responses to High-Dose Testosterone in Castration-Resistant Prostate Cancer Tumors with Mixed Rb-Proficient and Rb-Deficient Cells. *Molecular cancer therapeutics*, 24(5), 772.

Enroth TJ, et al. (2025) Global changes in *Staphylococcus aureus* virulence and metabolism during colonization of healthy skin. *Infection and immunity*, 93(4), e0002825.

Lee LH, et al. (2025) Defining Non-small Cell Lung Cancer Tumor Microenvironment Changes at Primary and Acquired Immune Checkpoint Inhibitor Resistance Using Clinical and Real-World Data. *Cancer research communications*, 5(6), 1049.

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.