# Resource Summary Report

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## Gene Set Enrichment Analysis

RRID:SCR_003199
Type: Tool

### Proper Citation

Gene Set Enrichment Analysis (RRID:SCR_003199)

### Resource Information

**URL:** http://www.broadinstitute.org/gsea/

**Proper Citation:** Gene Set Enrichment Analysis (RRID:SCR_003199)

**Description:** Software package for interpreting gene expression data. Used for interpretation of a large-scale experiment by identifying pathways and processes.

**Abbreviations:** GSEA

**Synonyms:** GSEA, Gene Set Enrichment Analysis, Gene Set Enrichment Analysis (GSEA)

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

**Defining Citation:** PMID:16199517

**Keywords:** gene, expression, profile, pathway, data, set, phenotype, genome, enrichment, RNA, analysis, bio.tools, bio.tools

**Funding:** NCI ;
NIH ;
NIGMS

**Availability:** Free, Freely available, Registration required to download, Tutorial available

**Resource Name:** Gene Set Enrichment Analysis

**Resource ID:** SCR_003199

**Alternate IDs:** nif-0000-30629, SCR_016882, biotools:gsea, OMICS_02279

**Alternate URLs:** http://www.broad.mit.edu/gsea, https://bio.tools/gsea

**License:** BSD license

**Record Creation Time:** 20220129T080217+0000

**Record Last Update:** 20250417T065130+0000

## Ratings and Alerts

No rating or validation information has been found for Gene Set Enrichment Analysis.

No alerts have been found for Gene Set Enrichment Analysis.

## Data and Source Information

**Source:** SciCrunch Registry

## Usage and Citation Metrics

We found 15835 mentions in open access literature.

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

Zhang JJ, et al. (2025) Eriocitrin ameliorates hepatic fibrosis and inflammation: The involvement of PPAR?-mediated NLRP1/NLRC4 inflammasome signaling cascades. Journal of ethnopharmacology, 338(Pt 3), 119119.

Cómitre-Mariano B, et al. (2025) S100A proteins show a spatial distribution of inflammation associated with the glioblastoma microenvironment architecture. Theranostics, 15(2), 726.

Hwang J, et al. (2025) Structurally Oriented Classification of FOXA1 Alterations Identifies Prostate Cancers with Opposing Clinical Outcomes and Distinct Molecular and Immunologic Subtypes. Clinical cancer research : an official journal of the American Association for Cancer Research, 31(5), 936.

Olney KC, et al. (2025) Distinct transcriptional alterations distinguish Lewy body disease from Alzheimer's disease. Brain : a journal of neurology, 148(1), 69.

Shigeno S, et al. (2025) Intrahepatic Exhausted Antiviral Immunity in an Immunocompetent Mouse Model of Chronic Hepatitis B. Cellular and molecular gastroenterology and hepatology, 19(1), 101412.

Huang S, et al. (2025) STAMBPL1/TRIM21 Balances AXL Stability Impacting Mesenchymal

Phenotype and Immune Response in KIRC. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 12(1), e2405083.

Fan M, et al. (2025) Borosilicate bioactive glass synergizing low-dose antibiotic loaded implants to combat bacteria through ATP disruption and oxidative stress to sequentially achieve osseointegration. Bioactive materials, 44, 184.

Wang J, et al. (2025) Characteristic alterations of gut microbiota and serum metabolites in patients with chronic tinnitus: a multi-omics analysis. Microbiology spectrum, 13(1), e0187824.

Lei M, et al. (2025) Prenatal Silicon Dioxide Nanoparticles Exposure Reduces Female Offspring Fertility Without Affecting Males. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 12(3), e2410353.

Liu Y, et al. (2025) Ginkgetin Alleviates Inflammation and Senescence by Targeting STING. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 12(2), e2407222.

Weber M, et al. (2025) Transcriptomic and proteomic profiling identifies feline fibrosarcoma as clinically amenable model for aggressive sarcoma subtypes. Neoplasia (New York, N.Y.), 60, 101104.

Mercado-Evans V, et al. (2025) Tamm-Horsfall protein augments neutrophil NETosis during urinary tract infection. JCI insight, 10(1).

Tejedor JR, et al. (2025) Integration of multi-omics layers empowers precision diagnosis through unveiling pathogenic mechanisms on maple syrup urine disease. Journal of inherited metabolic disease, 48(1), e12829.

Di-Luoffo M, et al. (2025) Mechanical compressive forces increase PI3K output signaling in breast and pancreatic cancer cells. Life science alliance, 8(3).

Alsaed B, et al. (2025) Intratumor heterogeneity of EGFR expression mediates targeted therapy resistance and formation of drug tolerant microenvironment. Nature communications, 16(1), 28.

Ma H, et al. (2025) ALKBH5 acts a tumor-suppressive biomarker and is associated with immunotherapy response in hepatocellular carcinoma. Scientific reports, 15(1), 55.

Huang XX, et al. (2025) Effects of RAR? ligand binding domain mutations on breast fibroepithelial tumor function and signaling. NPJ breast cancer, 11(1), 1.

Hu W, et al. (2025) CYP3A5 promotes glioblastoma stemness and chemoresistance through fine-tuning NAD+/NADH ratio. Journal of experimental & clinical cancer research : CR, 44(1), 3.

Li R, et al. (2025) Glycosylation gene expression profiles enable prognosis prediction for colorectal cancer. Scientific reports, 15(1), 798.

Yu P, et al. (2025) PWWP domain-containing protein Crf4-3 specifically modulates fungal

azole susceptibility by regulating sterol C-14 demethylase ERG11. mSphere, 10(1), e0070324.