

Resource Summary Report

Generated by [NIF](#) on Apr 9, 2025

Molecular Signatures Database

RRID:SCR_016863

Type: Tool

Proper Citation

Molecular Signatures Database (RRID:SCR_016863)

Resource Information

URL: <http://software.broadinstitute.org/gsea/msigdb/index.jsp>

Proper Citation: Molecular Signatures Database (RRID:SCR_016863)

Description: Collection of annotated gene sets for use with Gene Set Enrichment Analysis (GSEA) software.

Abbreviations: MSigDB

Synonyms: Molecular Signatures Database, The Molecular Signatures Database, MSigDB, MSigDB database v6.2

Resource Type: database, data or information resource

Keywords: collection, annotated, gene, set, GSEA, enrichment, analysis, genome, RNA, expression, data, FASEB list

Funding: NCI ;
NIH ;
NIGMS

Availability: Free, Freely available, Registration required to download GSEA software

Resource Name: Molecular Signatures Database

Resource ID: SCR_016863

License: Creative Commons Attribution 4.0 International License

Record Creation Time: 20220129T080332+0000

Record Last Update: 20250409T061447+0000

Ratings and Alerts

No rating or validation information has been found for Molecular Signatures Database.

No alerts have been found for Molecular Signatures Database.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 638 mentions in open access literature.

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

Corinaldesi C, et al. (2025) Single-cell transcriptomics of pediatric Burkitt lymphoma reveals intra-tumor heterogeneity and markers of therapy resistance. *Leukemia*, 39(1), 189.

Ye L, et al. (2025) Multi-omics identification of a novel signature for serous ovarian carcinoma in the context of 3P medicine and based on twelve programmed cell death patterns: a multi-cohort machine learning study. *Molecular medicine (Cambridge, Mass.)*, 31(1), 5.

Ohri N, et al. (2025) Gene expression dynamics in fibroblasts during early-stage murine pancreatic carcinogenesis. *iScience*, 28(1), 111572.

Zou YP, et al. (2025) Systematic identification of pathological mechanisms, prognostic biomarkers and therapeutic targets by integrating lncRNA expression variation in salivary gland mucoepidermoid carcinoma. *Scientific reports*, 15(1), 1573.

Pongma C, et al. (2025) Effect of mRNA formulated with lipid nanoparticles on the transcriptomic and epigenetic profiles of F4/80+ liver-associated macrophages. *Scientific reports*, 15(1), 1146.

Yu Z, et al. (2025) Accurate Spatial Heterogeneity Dissection and Gene Regulation Interpretation for Spatial Transcriptomics using Dual Graph Contrastive Learning. *Advanced science (Weinheim, Baden-Wuerttemberg, Germany)*, 12(3), e2410081.

Chen Y, et al. (2025) Comparative transcriptomics and metabolomics provide insight into degeneration-related physiological mechanisms of *Morchella importuna* after long-term preservation. *Microbial biotechnology*, 18(1), e70045.

Yu R, et al. (2025) ATRX mutation modifies the DNA damage response in glioblastoma multiforme tumor cells and enhances patient prognosis. *Medicine*, 104(2), e41180.

da Silva Fernandes T, et al. (2025) Inosine monophosphate dehydrogenase 2 (IMPDH2) modulates response to therapy and chemo-resistance in triple negative breast cancer. *Scientific reports*, 15(1), 1061.

Xiao Z, et al. (2024) Identification and immunological characterization of genes associated with ferroptosis in Alzheimer's disease and experimental demonstration. *Molecular medicine reports*, 30(3).

De Bellis C, et al. (2024) Genomic, epigenomic and transcriptomic inter- and intra-tumor heterogeneity in desmoid tumors. *Clinical cancer research : an official journal of the American Association for Cancer Research*.

Koganemaru S, et al. (2024) The tumor immune microenvironment and therapeutic efficacy of trastuzumab deruxtecan in gastric cancer. *Cancer research communications*.

Wang Y, et al. (2024) Leveraging programmed cell death signature to predict clinical outcome and immunotherapy benefits in postoperative bladder cancer. *Scientific reports*, 14(1), 22976.

Zhai W, et al. (2024) ADAMTS4 exacerbates lung cancer progression via regulating c-Myc protein stability and activating MAPK signaling pathway. *Biology direct*, 19(1), 94.

Torrance HD, et al. (2024) A Transcriptomic Approach to Understand Patient Susceptibility to Pneumonia After Abdominal Surgery. *Annals of surgery*, 279(3), 510.

Schott CR, et al. (2024) Osteosarcoma PDX-Derived Cell Line Models for Preclinical Drug Evaluation Demonstrate Metastasis Inhibition by Dinaciclib through a Genome-Targeted Approach. *Clinical cancer research : an official journal of the American Association for Cancer Research*, 30(4), 849.

Gong K, et al. (2024) Intestinal Nogo-B reduces GLP1 levels by binding to proglucagon on the endoplasmic reticulum to inhibit PCSK1 cleavage. *Nature communications*, 15(1), 6845.

Eiken AP, et al. (2024) Novel Spirocyclic Dimer, SpiD3, Targets Chronic Lymphocytic Leukemia Survival Pathways with Potent Preclinical Effects. *Cancer research communications*, 4(5), 1328.

Kink JA, et al. (2024) Large-scale bioreactor production of extracellular vesicles from mesenchymal stromal cells for treatment of acute radiation syndrome. *Stem cell research & therapy*, 15(1), 72.

Tian X, et al. (2024) LINC01614 is a promising diagnostic and prognostic marker in HNSC

linked to the tumor microenvironment and oncogenic function. *Frontiers in genetics*, 15, 1337525.