

# Resource Summary Report

Generated by [FDI Lab - SciCrunch.org](https://fdi-lab.sci-crunch.org) on Apr 14, 2025

## MISO

RRID:SCR\_003124

Type: Tool

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### Proper Citation

MISO (RRID:SCR\_003124)

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### Resource Information

**URL:** <http://genes.mit.edu/burgelab/miso/>

**Proper Citation:** MISO (RRID:SCR\_003124)

**Description:** Probabilistic framework that quantitates the expression level of alternatively spliced genes from RNA-Seq and identifies differentially regulated isoforms or exons across samples.

**Synonyms:** Mixture of Isoforms (MISO), Mixture of Isoforms

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

**Defining Citation:** [DOI:10.1038/nmeth.1528](https://doi.org/10.1038/nmeth.1528)

**Keywords:** probabilistic framework, framework, bayesian inference, isoform

**Funding:**

**Availability:** Available for download

**Resource Name:** MISO

**Resource ID:** SCR\_003124

**Alternate IDs:** OMICS\_01337

**Alternate URLs:** <https://github.com/yarden/MISO>

**License:** GPL 2+ license

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

**Record Last Update:** 20250412T054803+0000

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## Ratings and Alerts

No rating or validation information has been found for MISO.

No alerts have been found for MISO.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 171 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [FDI Lab - SciCrunch.org](#).

Zhao J, et al. (2024) Effect of thermal treatment on microcracking characteristics of granite under tensile condition based on bonded-particle model and moment tensor. *Scientific reports*, 14(1), 8806.

Samuel RM, et al. (2023) Generation of Schwann cell derived melanocytes from hPSCs identifies pro-metastatic factors in melanoma. *bioRxiv : the preprint server for biology*.

Pineda JMB, et al. (2023) DUX4 is a common driver of immune evasion and immunotherapy failure in metastatic cancers. *bioRxiv : the preprint server for biology*.

Jalloh B, et al. (2023) The Drosophila Nab2 RNA binding protein inhibits m6A methylation and male-specific splicing of Sex lethal transcript in female neuronal tissue. *eLife*, 12.

Tao Y, et al. (2023) Cell-free multi-omics analysis reveals potential biomarkers in gastrointestinal cancer patients' blood. *Cell reports. Medicine*, 4(11), 101281.

Dunker W, et al. (2023) The proto-oncogene SRC phosphorylates cGAS to inhibit an antitumor immune response. *JCI insight*, 8(12).

Wang F, et al. (2022) Single-cell architecture and functional requirement of alternative splicing during hematopoietic stem cell formation. *Science advances*, 8(1), eabg5369.

Lee K, et al. (2022) ASpediaFI: Functional Interaction Analysis of Alternative Splicing Events. *Genomics, proteomics & bioinformatics*, 20(3), 466.

Li S, et al. (2022) Nuclear Aurora kinase A switches m6A reader YTHDC1 to enhance an

oncogenic RNA splicing of tumor suppressor RBM4. *Signal transduction and targeted therapy*, 7(1), 97.

Ma XR, et al. (2022) TDP-43 represses cryptic exon inclusion in the FTD-ALS gene UNC13A. *Nature*, 603(7899), 124.

Zhu GQ, et al. (2022) Targeting HNRNPM Inhibits Cancer Stemness and Enhances Antitumor Immunity in Wnt-activated Hepatocellular Carcinoma. *Cellular and molecular gastroenterology and hepatology*, 13(5), 1413.

Gañez-Zapater A, et al. (2022) The SWI/SNF subunit BRG1 affects alternative splicing by changing RNA binding factor interactions with nascent RNA. *Molecular genetics and genomics* : MGG, 297(2), 463.

Jones A, et al. (2022) Multiomics analysis of the NAD<sup>+</sup>-PARP1 axis reveals a role for site-specific ADP-ribosylation in splicing in embryonic stem cells. *Genes & development*, 36(9-10), 601.

Xu T, et al. (2022) Alternative splicing downstream of EMT enhances phenotypic plasticity and malignant behavior in colon cancer. *eLife*, 11.

North K, et al. (2022) Synthetic introns enable splicing factor mutation-dependent targeting of cancer cells. *Nature biotechnology*, 40(7), 1103.

She X, et al. (2022) Accelerating input-output model estimation with parallel computing for testing hippocampal memory prostheses in human. *Journal of neuroscience methods*, 370, 109492.

Hauser D, et al. (2022) Targeted proteoform mapping uncovers specific Neurexin-3 variants required for dendritic inhibition. *Neuron*, 110(13), 2094.

Han BY, et al. (2022) HNRNPU promotes the progression of triple-negative breast cancer via RNA transcription and alternative splicing mechanisms. *Cell death & disease*, 13(11), 940.

Kitamura Y, et al. (2021) Identification of germ cell-specific Mga variant mRNA that promotes meiosis via impediment of a non-canonical PRC1. *Scientific reports*, 11(1), 9737.

Cha HJ, et al. (2021) Inner nuclear protein Matrin-3 coordinates cell differentiation by stabilizing chromatin architecture. *Nature communications*, 12(1), 6241.