

Resource Summary Report

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Multivariate Analysis of Transcript Splicing

RRID:SCR_013049

Type: Tool

Proper Citation

Multivariate Analysis of Transcript Splicing (RRID:SCR_013049)

Resource Information

URL: <http://rnaseq-mats.sourceforge.net/>

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Description: Software tool to detect differential alternative splicing events from RNA-Seq data. Calculates P value and false discovery rate that difference in isoform ratio of gene between two conditions exceeds given user defined threshold. Can automatically detect and analyze alternative splicing events corresponding to all major types of alternative splicing patterns. Handles replicate RNA-Seq data from both paired and unpaired study design.

Abbreviations: MATS

Synonyms: RNAseq MATS, RMATS, rMATS, MATS, RNA MATS

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

Keywords: Differential alternative splicing events, splicing events calculation, RNA-Seq data, gene isoform ratio, alternative splicing patterns, patterns detection, patterns analysis, replicate RNA-Seq data

Availability: Free, Available for download, Freely available

Resource Name: Multivariate Analysis of Transcript Splicing

Resource ID: SCR_013049

Alternate IDs: OMICS_01336, SCR_020941

License: 2-Clause BSD License

Record Creation Time: 20220129T080314+0000

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Ratings and Alerts

No rating or validation information has been found for Multivariate Analysis of Transcript Splicing.

No alerts have been found for Multivariate Analysis of Transcript Splicing.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 203 mentions in open access literature.

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

Song G, et al. (2026) Investigation of myofiber composition changes and molecular mechanisms in rabbit meat quality development during growth. BMC genomics, 27(1), 150.

Zhang B, et al. (2026) Human papillomavirus E7 inhibits immune responses in keratinocytes by activating HTRA1-mediated mitophagy. International journal of molecular medicine, 57(1).

Fan Z, et al. (2026) METTL3/m6A-Dependent SERPINE1/VEGFA Axis Mediates Sublethal Heat-Induced Angiogenesis in Hepatocellular Carcinoma. Mediators of inflammation, 2026(1), e5133850.

Zhang P, et al. (2025) DAZAP1 maintains gastric cancer stemness by inducing mitophagy. JCI insight, 10(10).

Ciftci E, et al. (2025) Current methods in the diagnosis of invasive meningococcal disease. Frontiers in pediatrics, 13, 1511086.

Kuppers DA, et al. (2025) N6-methyladenosine regulation of mRNA translation is essential for early human erythropoiesis. bioRxiv : the preprint server for biology.

Memon AA, et al. (2025) Fibrinogen genotypes and their impact on recurrence of venous thromboembolism and family history: A prospective population-based study. British journal of haematology, 206(2), 657.

González-Almela E, et al. (2025) Herpes simplex virus type 1 reshapes host chromatin architecture via transcription machinery hijacking. Nature communications, 16(1), 5313.

Borrow R, et al. (2025) Methods to evaluate the performance of a multicomponent meningococcal serogroup B vaccine. mSphere, 10(4), e0089824.

Ben X, et al. (2025) Transcriptome profiling reveals major structural genes, transcription factors and biosynthetic pathways in refractory epilepsy in tropical region of China. BMC

neurology, 25(1), 288.

Alvarez NS, et al. (2025) Dysregulation of alternative splicing patterns in the ovaries of reproductively aged mice. *bioRxiv : the preprint server for biology*.

Jin T, et al. (2025) SRSF7 promotes pulmonary fibrosis through regulating PKM alternative splicing in lung fibroblasts. *Acta pharmaceutica Sinica. B*, 15(6), 3041.

Falguières M, et al. (2025) Fluctuations in serogroup B meningococcal vaccine antigens prior to routine MenB vaccination in France. *Communications medicine*, 5(1), 87.

Jürgens M, et al. (2024) Chronic stimulation desensitizes α 2-adrenergic receptor responses in natural killer cells. *European journal of immunology*, 54(12), e2451299.

An MJ, et al. (2024) Reorganization of H3K9me heterochromatin leads to neuronal impairment via the cascading destruction of the KDM3B-centered epigenomic network. *iScience*, 27(8), 110380.

Gan J, et al. (2024) RNA-seq analysis reveals transcriptome reprogramming and alternative splicing during early response to salt stress in tomato root. *Frontiers in plant science*, 15, 1394223.

Efron A, et al. (2024) Genetic characterization and estimated 4CMenB vaccine strain coverage of 284 *Neisseria meningitidis* isolates causing invasive meningococcal disease in Argentina in 2010-2014. *Human vaccines & immunotherapeutics*, 20(1), 2378537.

Romeo-Cardellac C, et al. (2024) Uncovering a multitude of stage-specific splice variants and putative protein isoforms generated along mouse spermatogenesis. *BMC genomics*, 25(1), 295.

Han M, et al. (2024) Responsive Alternative Splicing Events of *Opisthopappus* Species against Salt Stress. *International journal of molecular sciences*, 25(2).

Calvert A, et al. (2024) Risk of Invasive Meningococcal Disease in Preterm Infants. *Open forum infectious diseases*, 11(4), ofae164.