

Resource Summary Report

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MAxEntScan

RRID:SCR_016707

Type: Tool

Proper Citation

MAxEntScan (RRID:SCR_016707)

Resource Information

URL: http://genes.mit.edu/burgelab/maxent/Xmaxentscan_scoreseq.html

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Description: Software tool as a framework for modeling the sequences of short sequence motifs based on the maximum entropy principle (MEP). Used for sequence motifs such as those involved in RNA splicing.

Abbreviations: MAxEntScan

Synonyms: Maximum Entropy Scan, MAxEntScan, MAMaximumEntropyScan

Resource Type: service resource, simulation software, software application, software resource

Defining Citation: [PMID:15285897](#)

Keywords: modeling, sequence, short, motif, maximum, entropy, principle, MEP, RNA, splicing

Funding: Lee Kuan Yew Scholarship for the goverment of Singapore ;
NIH ;
NSF Grant 0218506

Availability: Free, Available for download, Freely available

Resource Name: MAxEntScan

Resource ID: SCR_016707

Record Creation Time: 20220129T080332+0000

Record Last Update: 20260829T182521+0000

Ratings and Alerts

No rating or validation information has been found for MAXEntScan.

No alerts have been found for MAXEntScan.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 70 mentions in open access literature.

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

Shi T, et al. (2026) Functional reassessment of extended splice region variants in MYO7A with hearing loss and Usher syndrome. *The Journal of pathology*, 269(2), 222.

Zhang J, et al. (2025) Novel pathogenic splicing mutation in COL11A1 in a patient with Stickler syndrome verified by minigene splicing assay. *Frontiers in genetics*, 16, 1642604.

García-Ruiz S, et al. (2025) Splicing accuracy varies across human introns, tissues, age and disease. *Nature communications*, 16(1), 1068.

Michel L, et al. (2025) Unraveling variability in young children's brain responses to varied sensory stimulations. *iScience*, 28(11), 113773.

Spangsberg Petersen US, et al. (2024) Regulating PCCA gene expression by modulation of pseudoexon splicing patterns to rescue enzyme activity in propionic acidemia. *Molecular therapy. Nucleic acids*, 35(1), 102101.

Riaz H, et al. (2024) The spectrum of novel ABCB11 gene variations in children with progressive familial intrahepatic cholestasis type 2 in Pakistani cohorts. *Scientific reports*, 14(1), 18876.

Zhang C, et al. (2024) A Novel Splice Site Mutation in the FBN2 Gene in a Chinese Family with Congenital Contractural Arachnodactyly. *Biochemical genetics*, 62(4), 2495.

García-Ruiz S, et al. (2023) Splicing accuracy varies across human introns, tissues and age. *bioRxiv : the preprint server for biology*.

Koczkowska M, et al. (2023) Analysis of 200 unrelated individuals with a constitutional NF1 deep intronic pathogenic variant reveals that variants flanking the alternatively spliced NF1 exon 31 [23a] cause a classical neurofibromatosis type 1 phenotype while altering predominantly NF1 isoform type II. *Human genetics*, 142(7), 849.

Fang Y, et al. (2023) Genetic analysis and prenatal diagnosis of short-rib thoracic dysplasia 3 with or without polydactyly caused by compound heterozygous variants of DYNC2H1 gene in four Chinese families. *Frontiers in genetics*, 14, 1075187.

Okada E, et al. (2023) All reported non-canonical splice site variants in GLA cause aberrant splicing. *Clinical and experimental nephrology*, 27(9), 737.

Yi T, et al. (2023) Genetic aetiology distribution of 398 fetuses with congenital heart disease in the prenatal setting. *ESC heart failure*, 10(2), 917.

Lu F, et al. (2022) Estimating the frequency of causal genetic variants in fetuses with congenital heart defects: a Chinese cohort study. *Orphanet journal of rare diseases*, 17(1), 2.

Yi T, et al. (2022) Genetic and Clinical Features of Heterotaxy in a Prenatal Cohort. *Frontiers in genetics*, 13, 818241.

Li L, et al. (2022) Description of the Molecular and Phenotypic Spectrum of Lesch-Nyhan Disease in Eight Chinese Patients. *Frontiers in genetics*, 13, 868942.

Barbosa P, et al. (2022) Computational prediction of human deep intronic variation. *GigaScience*, 12.

Wang S, et al. (2021) Detection of TSC1/TSC2 mosaic variants in patients with cardiac rhabdomyoma and tuberous sclerosis complex by hybrid-capture next-generation sequencing. *Molecular genetics & genomic medicine*, 9(10), e1802.

Pio MG, et al. (2021) Curating the gnomAD database: Report of novel variants in the thyroglobulin gene using in silico bioinformatics algorithms. *Molecular and cellular endocrinology*, 534, 111359.

Pio MG, et al. (2021) A novel mutation in intron 11 donor splice site, responsible of a rare genotype in thyroglobulin gene by altering the pre-mRNA splicing process. *Cell expression and bioinformatic analysis*. *Molecular and cellular endocrinology*, 522, 111124.

Yu B, et al. (2021) Mutation of c.244G>T in NR5A1 gene causing 46, XY DSD by affecting RNA splicing. *Orphanet journal of rare diseases*, 16(1), 370.