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

Proper Citation: MAxEntScan (RRID:SCR_016707)

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, MAximumEntropyScan

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

Defining Citation: PMID:15285897

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

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

Availability: Free, Available for download, Freely available

Resource Name: MAxEntScan

Resource ID: SCR_016707

Record Creation Time: 20220129T080332+0000

Record Last Update: 20250429T055845+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 64 mentions in open access literature.

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

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

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.

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.

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

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

Okada E, et al. (2023) All reported non-canonical splice site variants in GLA cause aberrant

splicing. Clinical and experimental nephrology, 27(9), 737.

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

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

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 splincing process. Cell expression and bioinformatic analysis. Molecular and cellular endocrinology, 522, 111124.

Wang X, et al. (2021) mRNA analysis identifies deep intronic variants causing Alport syndrome and overcomes the problem of negative results of exome sequencing. Scientific reports, 11(1), 18097.

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.

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 thyrogobulin gene using in silico bioinformatics algorithms. Molecular and cellular endocrinology, 534, 111359.

Austenaa LMI, et al. (2021) A first exon termination checkpoint preferentially suppresses extragenic transcription. Nature structural & molecular biology, 28(4), 337.

Guo L, et al. (2021) Deficiency of TMEM53 causes a previously unknown sclerosing bone disorder by dysregulation of BMP-SMAD signaling. Nature communications, 12(1), 2046.

Lu X, et al. (2021) Novel Intronic Mutations Introduce Pseudoexons in DMD That Cause Muscular Dystrophy in Patients. Frontiers in genetics, 12, 657040.

Akhavanfard S, et al. (2021) Germline EGFR variants are over-represented in adolescents and young adults (AYA) with adrenocortical carcinoma. Human molecular genetics, 29(22), 3679.

Wang TY, et al. (2021) A pan-cancer transcriptome analysis of exitron splicing identifies novel cancer driver genes and neoepitopes. Molecular cell, 81(10), 2246.