Resource Summary Report

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TranspoGene

RRID:SCR_005634
Type: Tool

Proper Citation

TranspoGene (RRID:SCR_005634)

Resource Information

URL: http://transpogene.tau.ac.il/

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Description: A publicly available database of Transposed elements (TEs) which are located within protein-coding genes of 7 organisms: human, mouse, chicken, zebrafish, fruilt fly, nematode and sea squirt. Using TranspoGene the user can learn about the many aspects of the effect these TEs have on their hosting genes, such as: exonization events (including alternative splicing-related data), insertion of TEs into introns, exons, and promoters, specific location of the TE over the gene, evolutionary divergence of the TE from its consensus sequence and involvement in diseases. TranspoGene database is quickly searchable through its website, enables many kinds of searches and is available for download. TranspoGene contains information regarding specific type and family of the TEs, genomic and mRNA location, sequence, supporting transcript accession and alignment to the TE consensus sequence. The database also contains host gene specific data: gene name, genomic location, Swiss-Prot and RefSeq accessions, diseases associated with the gene and splicing pattern. The TranspoGene and microTranspoGene databases can be used by researchers interested in the effect of TE insertion on the eukaryotic transcriptome.

Synonyms: TranspoGene

Resource Type: data or information resource, database

Keywords: element, eukaryotic, evolutionary, exon, exonization, family, fruit fly, gene, genome, alternative, chicken, coding, disease, divergence, genomic, hosting, human, human genome databases, intron, location, map, maps, mouse, mrna, nematode, organism, pattern, promoter, protein, sea squirt, sequence, splicing, transcript, transcriptome, transposed, viewers, worm, zebrafish

Funding:

Resource Name: TranspoGene

Resource ID: SCR_005634

Alternate IDs: nif-0000-03579

Record Creation Time: 20220129T080231+0000

Record Last Update: 20250426T055804+0000

Ratings and Alerts

No rating or validation information has been found for TranspoGene.

No alerts have been found for TranspoGene.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 9 mentions in open access literature.

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

Erdman VV, et al. (2022) Alu Deletions in LAMA2 and CDH4 Genes Are Key Components of Polygenic Predictors of Longevity. International journal of molecular sciences, 23(21).

Fishman V, et al. (2019) 3D organization of chicken genome demonstrates evolutionary conservation of topologically associated domains and highlights unique architecture of erythrocytes' chromatin. Nucleic acids research, 47(2), 648.

Tangsuwansri C, et al. (2018) Investigation of epigenetic regulatory networks associated with autism spectrum disorder (ASD) by integrated global LINE-1 methylation and gene expression profiling analyses. PloS one, 13(7), e0201071.

Saeliw T, et al. (2018) Integrated genome-wide Alu methylation and transcriptome profiling analyses reveal novel epigenetic regulatory networks associated with autism spectrum disorder. Molecular autism, 9, 27.

Farré D, et al. (2016) Novel Role of 3'UTR-Embedded Alu Elements as Facilitators of Processed Pseudogene Genesis and Host Gene Capture by Viral Genomes. PloS one, 11(12), e0169196.

Papamichos SI, et al. (2015) Adaptive Evolution Coupled with Retrotransposon Exaptation Allowed for the Generation of a Human-Protein-Specific Coding Gene That Promotes Cancer Cell Proliferation and Metastasis in Both Haematological Malignancies and Solid Tumours: The Extraordinary Case of MYEOV Gene. Scientifica, 2015, 984706.

Scott-Boyer MP, et al. (2013) Genome-Wide Detection of Gene Coexpression Domains Showing Linkage to Regions Enriched with Polymorphic Retrotransposons in Recombinant Inbred Mouse Strains. G3 (Bethesda, Md.), 3(4), 597.

Ren YF, et al. (2012) Dicer-dependent biogenesis of small RNAs derived from 7SL RNA. PloS one, 7(7), e40705.

Sela N, et al. (2010) The role of transposable elements in the evolution of non-mammalian vertebrates and invertebrates. Genome biology, 11(6), R59.