

Resource Summary Report

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TESS: Transcription Element Search System

RRID:SCR_010739

Type: Tool

Proper Citation

TESS: Transcription Element Search System (RRID:SCR_010739)

Resource Information

URL: <http://www.cbil.upenn.edu/cgi-bin/tess/tess>

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Description: TESS is a web tool for predicting transcription factor binding sites in DNA sequences. It can identify binding sites using site or consensus strings and positional weight matrices from the TRANSFAC, JASPAR, IMD, and our CBIL-GibbsMat database. You can use TESS to search a few of your own sequences or for user-defined CRMs genome-wide near genes throughout genomes of interest. Search for CRMs Genome-wide: TESS now has the ability to search whole genomes for user defined CRMs. Try a search in the AnGEL CRM Searches section of the navigation bar.. You can search for combinations of consensus site sequences and/or PWMs from TRANSFAC or JASPAR. Search DNA for Binding Sites: TESS also lets you search through your own sequence for TFBS. You can include your own site or consensus strings and/or weight matrices in the search. Use the Combined Search under "Site Searches" in the menu or use the box for a quick search. TESS assigns a TESS job number to all sequence search jobs. The job results are stored on our server for a period of time specified in the search submit form. During this time you may recall the search results using the form on this page. TESS can also email results to you as a tab-delimited file suitable for loading into a spreadsheet program. Query for Transcription Factor Info: TESS also has data browsing and querying capabilities to help you learn about the factors that were predicted to bind to your sequence. Use the Query TRANSFAC or Query Matrices links above or use the search interface provided from the home page.

Abbreviations: TESS

Synonyms: Transcription Element Search System

Resource Type: analysis service resource, data analysis service, data or information resource, database, production service resource, service resource

Defining Citation: [PMID:18428685](#)

Keywords: transcription factor, dna sequence, genome, promoter, gene regulation, FASEB list

Resource Name: TESS: Transcription Element Search System

Resource ID: SCR_010739

Alternate IDs: nlx_97404

Old URLs: <http://www.pcbi.upenn.edu/tess>

Record Creation Time: 20220129T080300+0000

Record Last Update: 20260829T182345+0000

Ratings and Alerts

No rating or validation information has been found for TESS: Transcription Element Search System.

No alerts have been found for TESS: Transcription Element Search System.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 191 mentions in open access literature.

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

Li L, et al. (2026) MMP9 regulates osteogenesis and MMP2 expression through the TGF- β 1/SMAD2/3 signaling pathway in lipopolysaccharide-induced osteoblasts. Brazilian journal of medical and biological research = Revista brasileira de pesquisas medicas e biologicas, 59, e15172.

Casasnovas-Nieves JJ, et al. (2023) Mechanisms of Regulation of the CHRD1 Gene by the TWIST2 and ADD1/SREBP1c Transcription Factors. Genes, 14(9).

Wang Y, et al. (2022) Complement component 3 haplotypes influence serum complement activity and milk production traits in Chinese Holstein cattle. PloS one, 17(6), e0268959.

Simon M, et al. (2021) Autoantibodies from Patients with Scleroderma Renal Crisis Promote PAR-1 Receptor Activation and IL-6 Production in Endothelial Cells. International journal of molecular sciences, 22(21).

Zhu G, et al. (2019) Receptor-interacting serine/threonine-protein kinase 1 promotes the progress and lymph metastasis of gallbladder cancer. Oncology reports, 42(6), 2435.

Yun JW, et al. (2019) Glutathione peroxidase-1 inhibits transcription of regenerating islet-derived protein-2 in pancreatic islets. *Free radical biology & medicine*, 134, 385.

Dahodwala H, et al. (2019) Increased mAb production in amplified CHO cell lines is associated with increased interaction of CREB1 with transgene promoter. *Current research in biotechnology*, 1, 49.

Lin C, et al. (2018) Grass Carp Prolactin Gene: Structural Characterization and Signal Transduction for PACAP-induced Prolactin Promoter Activity. *Scientific reports*, 8(1), 4655.

Lin YJ, et al. (2018) NTF3 Is a Novel Target Gene of the Transcription Factor POU3F2 and Is Required for Neuronal Differentiation. *Molecular neurobiology*, 55(11), 8403.

Yan L, et al. (2018) Inhibitory effect of PXR on ammonia-induced hepatocyte autophagy via P53. *Toxicology letters*, 295, 153.

Su Y, et al. (2018) Optimizing combination of liver-enriched transcription factors and nuclear receptors simultaneously favors ammonia and drug metabolism in liver cells. *Experimental cell research*, 362(2), 504.

Pires BR, et al. (2017) NF-kappaB Is Involved in the Regulation of EMT Genes in Breast Cancer Cells. *PloS one*, 12(1), e0169622.

Kuwajima T, et al. (2017) SoxC Transcription Factors Promote Contralateral Retinal Ganglion Cell Differentiation and Axon Guidance in the Mouse Visual System. *Neuron*, 93(5), 1110.

Brooke-Bisschop T, et al. (2017) Essential roles for Cdx in murine primitive hematopoiesis. *Developmental biology*, 422(2), 115.

Zhang X, et al. (2017) SIRT2 gene has a classic SRE element, is a downstream target of serum response factor and is likely activated during serum stimulation. *PloS one*, 12(12), e0190011.

Jun DY, et al. (2017) Tumor suppressor protein p53-mediated repression of human mitotic centromere-associated kinesin gene expression is exerted via down-regulation of Sp1 level. *PloS one*, 12(12), e0189698.

Chen Z, et al. (2017) Klf5 Mediates Odontoblastic Differentiation through Regulating Dentin-Specific Extracellular Matrix Gene Expression during Mouse Tooth Development. *Scientific reports*, 7, 46746.

Chen Z, et al. (2017) The activity of the carbamoyl phosphate synthase 1 promoter in human liver-derived cells is dependent on hepatocyte nuclear factor 3-beta. *Journal of cellular and molecular medicine*, 21(9), 2036.

Zheng G, et al. (2017) Chronic stress and intestinal barrier dysfunction: Glucocorticoid receptor and transcription repressor HES1 regulate tight junction protein Claudin-1 promoter. *Scientific reports*, 7(1), 4502.

Na S, et al. (2017) The induction of cytochrome P450 2E1 by ethanol leads to the loss of synaptic proteins via PPAR γ down-regulation. *Toxicology*, 385, 18.