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Yeast Search for Transcriptional Regulators And Consensus Tracking

RRID:SCR_006076 Type: Tool

Proper Citation

Yeast Search for Transcriptional Regulators And Consensus Tracking (RRID:SCR_006076)

Resource Information

URL: http://www.yeastract.com

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Description: A curated repository of more than 206000 regulatory associations between transcription factors (TF) and target genes in Saccharomyces cerevisiae, based on more than 1300 bibliographic references. It also includes the description of 326 specific DNA binding sites shared among 113 characterized TFs. Further information about each Yeast gene has been extracted from the Saccharomyces Genome Database (SGD). For each gene the associated Gene Ontology (GO) terms and their hierarchy in GO was obtained from the GO consortium. Currently, YEASTRACT maintains a total of 7130 terms from GO. The nucleotide sequences of the promoter and coding regions for Yeast genes were obtained from Regulatory Sequence Analysis Tools (RSAT). All the information in YEASTRACT is updated regularly to match the latest data from SGD, GO consortium, RSA Tools and recent literature on yeast regulatory networks. YEASTRACT includes DISCOVERER, a set of tools that can be used to identify complex motifs found to be over-represented in the promoter regions of co-regulated genes. DISCOVERER is based on the MUSA algorithm. These algorithms take as input a list of genes and identify over-represented motifs, which can then be compared with transcription factor binding sites described in the YEASTRACT database.

Abbreviations: YEASTRACT

Resource Type: database, data or information resource

Defining Citation: PMID:24170807, PMID:20972212, PMID:18032429, PMID:16381908

Keywords: yeast, gene, regulatory association, transcription factor, target gene, genomic,

transcription regulation, transcription, web service, bio.tools, FASEB list

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Availability: Free

Resource Name: Yeast Search for Transcriptional Regulators And Consensus Tracking

Resource ID: SCR_006076

Alternate IDs: nif-0000-03652, OMICS_00547, biotools:yeastract

Alternate URLs: https://bio.tools/yeastract

Record Creation Time: 20220129T080234+0000

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Ratings and Alerts

No rating or validation information has been found for Yeast Search for Transcriptional Regulators And Consensus Tracking.

No alerts have been found for Yeast Search for Transcriptional Regulators And Consensus Tracking.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 117 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>dkNET</u>.

Zuo W, et al. (2025) Engineering artificial cross-species promoters with different transcriptional strengths. Synthetic and systems biotechnology, 10(1), 49.

Lin X, et al. (2024) Novel transcriptional regulation of the GAP promoter in Pichia pastoris towards high expression of heterologous proteins. Microbial cell factories, 23(1), 206.

Mota MN, et al. (2024) Shared and more specific genetic determinants and pathways

underlying yeast tolerance to acetic, butyric, and octanoic acids. Microbial cell factories, 23(1), 71.

Pontes A, et al. (2024) Tracking alternative versions of the galactose gene network in the genus Saccharomyces and their expansion after domestication. iScience, 27(2), 108987.

Bari KA, et al. (2023) Tra1 controls the transcriptional landscape of the aging cell. G3 (Bethesda, Md.), 13(1).

Park ZM, et al. (2023) Kar4 is Required for the Normal Pattern of Meiotic Gene Expression. bioRxiv : the preprint server for biology.

Das D, et al. (2023) Insights into the identification and evolutionary conservation of key genes in the transcriptional circuits of meiosis initiation and commitment in budding yeast. FEBS open bio, 13(12), 2290.

Sing CN, et al. (2022) Identification of a modulator of the actin cytoskeleton, mitochondria, nutrient metabolism and lifespan in yeast. Nature communications, 13(1), 2706.

Askari F, et al. (2022) The yapsin family of aspartyl proteases regulate glucose homeostasis in Candida glabrata. The Journal of biological chemistry, 298(2), 101593.

Parab L, et al. (2022) Transcription factor binding process is the primary driver of noise in gene expression. PLoS genetics, 18(12), e1010535.

Jiménez-Gutiérrez E, et al. (2022) Neomycin Interferes with Phosphatidylinositol-4,5-Bisphosphate at the Yeast Plasma Membrane and Activates the Cell Wall Integrity Pathway. International journal of molecular sciences, 23(19).

Ravoityt? B, et al. (2022) Adaptive Response of Saccharomyces Hosts to Totiviridae L-A dsRNA Viruses Is Achieved through Intrinsically Balanced Action of Targeted Transcription Factors. Journal of fungi (Basel, Switzerland), 8(4).

Cheng Y, et al. (2021) Eukaryotic translation factor eIF5A contributes to acetic acid tolerance in Saccharomyces cerevisiae via transcriptional factor Ume6p. Biotechnology for biofuels, 14(1), 38.

Sharma M, et al. (2021) Genetic interaction between RLM1 and F-box motif encoding gene SAF1 contributes to stress response in Saccharomyces cerevisiae. Genes and environment : the official journal of the Japanese Environmental Mutagen Society, 43(1), 45.

Liu Y, et al. (2021) Stress tolerance enhancement via SPT15 base editing in Saccharomyces cerevisiae. Biotechnology for biofuels, 14(1), 155.

Jia SL, et al. (2021) Molecular evolution and regulation of DHN melanin-related gene clusters are closely related to adaptation of different melanin-producing fungi. Genomics, 113(4), 1962.

Kovács K, et al. (2021) Suboptimal Global Transcriptional Response Increases the Harmful

Effects of Loss-of-Function Mutations. Molecular biology and evolution, 38(3), 1137.

Samakkarn W, et al. (2021) Reprogramming of the Ethanol Stress Response in Saccharomyces cerevisiae by the Transcription Factor Znf1 and Its Effect on the Biosynthesis of Glycerol and Ethanol. Applied and environmental microbiology, 87(16), e0058821.

Sinha M, et al. (2021) Modulation of fungal virulence through CRZ1 regulated F-BARdependent actin remodeling and endocytosis in chickpea infecting phytopathogen Ascochyta rabiei. PLoS genetics, 17(5), e1009137.

Ergün BG, et al. (2021) Hybrid-architectured promoter design to engineer expression in yeast. Methods in enzymology, 660, 81.