Resource Summary Report

Generated by NIF on May 19, 2025

T-profiler

RRID:SCR_003452
Type: Tool

Proper Citation

T-profiler (RRID:SCR_003452)

Resource Information

URL: http://www.t-profiler.org

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Description: One of the key challenges in the analysis of gene expression data is how to relate the expression level of individual genes to the underlying transcriptional programs and cellular state. The T-profiler tool hosted on this website uses the t-test to score changes in the average activity of pre-defined groups of genes. The gene groups are defined based on Gene Ontology categorization, ChIP-chip experiments, upstream matches to a consensus transcription factor binding motif, and location on the same chromosome, respectively. If desired, an iterative procedure can be used to select a single, optimal representative from sets of overlapping gene groups. A jack-knife procedure is used to make calculations more robust against outliers. T-profiler makes it possible to interpret microarray data in a way that is both intuitive and statistically rigorous, without the need to combine experiments or choose parameters. Currently, gene expression data from Saccharomyces cerevisiae and Candida albicans are supported. Users can submit their microarray data for analysis by clicking on one of the two organism-specific tabs above. Platform: Online tool

Abbreviations: T-profiler

Synonyms: T-profiler: Scoring the Activity of Pre-defined Groups of Genes Using Gene Expression Data

Resource Type: production service resource, data analysis service, service resource, analysis service resource

Defining Citation: PMID:15980543

Keywords: expression, gene, binding, cellular, transcriptional, gene expression, microarray,

gene ontology, transcription factor, binding motif, chip-chip, chip, motif, t-test, statistical analysis, transcriptome, bio.tools

Funding: Netherlands Foundation for Technical Research APB.5504; NHGRI R01HG003008

Availability: Free for academic use

Resource Name: T-profiler

Resource ID: SCR_003452

Alternate IDs: nif-0000-33354, biotools:t-profiler

Alternate URLs: https://bio.tools/t-profiler

Record Creation Time: 20220129T080219+0000

Record Last Update: 20250519T204646+0000

Ratings and Alerts

No rating or validation information has been found for T-profiler.

No alerts have been found for T-profiler.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 11 mentions in open access literature.

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

Luu LDW, et al. (2018) Comparison of the Whole Cell Proteome and Secretome of Epidemic Bordetella pertussis Strains From the 2008-2012 Australian Epidemic Under Sulfate-Modulating Conditions. Frontiers in microbiology, 9, 2851.

Hosiner D, et al. (2014) Impact of acute metal stress in Saccharomyces cerevisiae. PloS one, 9(1), e83330.

Driessen M, et al. (2014) Gene expression markers in the zebrafish embryo reflect a hepatotoxic response in animal models and humans. Toxicology letters, 230(1), 48.

Petryk N, et al. (2014) Functional study of the Hap4-like genes suggests that the key

regulators of carbon metabolism HAP4 and oxidative stress response YAP1 in yeast diverged from a common ancestor. PloS one, 9(12), e112263.

Khatri P, et al. (2012) Ten years of pathway analysis: current approaches and outstanding challenges. PLoS computational biology, 8(2), e1002375.

Brush GS, et al. (2012) Yeast IME2 functions early in meiosis upstream of cell cycle-regulated SBF and MBF targets. PloS one, 7(2), e31575.

Kuper CF, et al. (2011) Oxazolone (OXA) is a respiratory allergen in Brown Norway rats. Toxicology, 290(1), 59.

Ma M, et al. (2010) Comparative transcriptome profiling analyses during the lag phase uncover YAP1, PDR1, PDR3, RPN4, and HSF1 as key regulatory genes in genomic adaptation to the lignocellulose derived inhibitor HMF for Saccharomyces cerevisiae. BMC genomics, 11, 660.

Radonjic M, et al. (2009) Effect of body fat distribution on the transcription response to dietary fat interventions. Genes & nutrition, 4(2), 143.

Kuper CF, et al. (2008) The contact allergen dinitrochlorobenzene (DNCB) and respiratory allergy in the Th2-prone Brown Norway rat. Toxicology, 246(2-3), 213.

Fox JA, et al. (2005) The Bioinformatics Links Directory: a compilation of molecular biology web servers. Nucleic acids research, 33(Web Server issue), W3.