

Resource Summary Report

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WebGestalt: WEB-based GENE SeT AnaLysis Toolkit

RRID:SCR_006786

Type: Tool

Proper Citation

WebGestalt: WEB-based GENE SeT AnaLysis Toolkit (RRID:SCR_006786)

Resource Information

URL: <http://www.webgestalt.org/>

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Description: Web based gene set analysis toolkit designed for functional genomic, proteomic, and large-scale genetic studies from which large number of gene lists (e.g. differentially expressed gene sets, co-expressed gene sets etc) are continuously generated. WebGestalt incorporates information from different public resources and provides a way for biologists to make sense out of gene lists. This version of WebGestalt supports eight organisms, including human, mouse, rat, worm, fly, yeast, dog, and zebrafish.

Abbreviations: WebGestalt

Synonyms: GOTM, Gene Ontology Tree Machine, WebGestalt2, WEB-based GENE SeT AnaLysis Toolkit, WebGestalt

Resource Type: data access protocol, software resource, web application, web service

Defining Citation: [PMID:24233776](#), [PMID:15980575](#), [PMID:14975175](#)

Keywords: proteomic, gene expression, genome wide association study, statistical analysis, functional genomics, protein protein interaction, pathway, regulatory module, analysis toolkit, web application

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NIDA P01 DA015027;
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NIMH P50 MH078028;
NIMH P50 MH096972

Availability: Free, Freely available

Resource Name: WebGestalt: WEB-based GEne SeT AnaLysis Toolkit

Resource ID: SCR_006786

Alternate IDs: OMICS_02222, nif-0000-30622

Old URLs: <http://bioinfo.vanderbilt.edu/webgestalt/>

Record Creation Time: 20220129T080238+0000

Record Last Update: 20260912T195645+0000

Ratings and Alerts

No rating or validation information has been found for WebGestalt: WEB-based GEne SeT AnaLysis Toolkit.

No alerts have been found for WebGestalt: WEB-based GEne SeT AnaLysis Toolkit.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 3155 mentions in open access literature.

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

Voisin T, et al. (2026) Skin inflammation and itch response are independently regulated by distinct nociceptor subsets. *Immunity*, 59(5), 1237.

Calderon-Aparicio A, et al. (2026) S6K1 Modulates STAT3 Activation to Promote Resistance to Radiotherapy in Lung Cancer. *International journal of molecular sciences*, 27(4).

Thege FI, et al. (2026) An autochthonous CRISPR activation screening platform for characterizing tissue-specific oncogene selection. *Cell reports. Medicine*, 7(5), 102759.

Matías-García PR, et al. (2026) DNAm landscape up to 4 months post SARS-CoV-2 infection: insights from four population-based cohorts. *Clinical epigenetics*, 18(1).

Mishra S, et al. (2026) Decoding Genetic Risk Factors in Recurrent Pregnancy Loss: An Integrative Chromosomal and Bioinformatics Approach. *Biochemical genetics*.

Radloff HS, et al. (2026) A single-cell derived spheroid approach to dissect intratumoural heterogeneity in colorectal cancer: cell lines show changes in proteomes and therapeutic response to 5-FU. *Journal of cancer research and clinical oncology*, 152(1), 43.

Fernandez Garcia M, et al. (2026) Transcriptomic and phenotypic convergence of neurodevelopmental disorder risk genes in vitro and in vivo. *Nature neuroscience*, 29(5), 1079.

Yan C, et al. (2026) RAS/MEK/PI3K pathway inhibition augments response to CD40 agonism by targeting CD11b⁺ Bregs thereby overcoming melanoma PD1-resistance. *Nature communications*, 17(1), 162.

Triebig AS, et al. (2026) Glucocorticoids induce a phagocytic C1Q⁺ macrophage phenotype primed for IFN γ -dependent CXCL9 secretion. *Scientific reports*, 16(1).

Dovey Z, et al. (2026) Network and Gene Set Enrichment Analysis of Adipokine Drivers of Prostate Cancer; Unravelling the Mechanistic Link Between Excess Adiposity and Prostate Cancer Risk. *Cancer medicine*, 15(1), e71468.

Krüger AF, et al. (2026) Adrenocortical Mitochondria-Associated Membranes: Isolation, Characterization, and Lipidoproteomic Response to Mitotane. *Journal of the Endocrine Society*, 10(1), bvaf198.

Liu F, et al. (2026) Unveiling the Therapeutic Potential of "Taikong Blue" Lavender Essential Oil and Its Key Compounds in Skin Problems via Network Pharmacology and In Vitro Validation. *Journal of cosmetic dermatology*, 25(2), e70640.

Ayass MA, et al. (2026) Non-invasive host transcriptome and HPV oncogene expression map the molecular landscape of HPV-driven cervical lesions. *PloS one*, 21(3), e0339693.

Zheng Y, et al. (2026) X-Box Binding Protein 1 Regulates Osteogenesis of Periodontal Ligament Cells During Aging by Modulating P53 Signaling Pathway. *Stem cells international*, 2026, 2846096.

Gu S, et al. (2026) Isoquinoline alkaloids in *Coptis chinensis* to treat Alzheimer's disease through promoting growth of *Bifidobacterium breve* inhibiting abnormal autophagy using a novel AI high-content intelligent imaging system. *Chinese herbal medicines*, 18(2), 405.

Jakobsson M, et al. (2026) *Homo sapiens*-specific evolution unveiled by ancient southern African genomes. *Nature*, 650(8100), 156.

Tinning H, et al. (2026) The embryo-derived protein PDI is highly conserved among placental mammals and alters the endometrial transcriptome and secretome in vitro across species with differing implantation strategies†. *Biology of reproduction*, 114(4), 1295.

Lee D, et al. (2026) Neuronal MCT2 promotes angiogenesis via lactate in the developing mouse neocortex. *Cell death and differentiation*, 33(3), 539.

Liu X, et al. (2026) Identification of multigene predictors of prognosis in patients with ovarian cancer. *iScience*, 29(3), 114932.

Shakir D, et al. (2026) NF- κ B is a central regulator of hypoxia-induced gene expression. *EMBO reports*, 27(2), 416.