## **Resource Summary Report**

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# **Genomatix Software: Understanding Gene Regulation**

RRID:SCR\_008036 Type: Tool

## **Proper Citation**

Genomatix Software: Understanding Gene Regulation (RRID:SCR\_008036)

### **Resource Information**

URL: http://www.genomatix.de/

**Proper Citation:** Genomatix Software: Understanding Gene Regulation (RRID:SCR\_008036)

**Description:** Genomatix is a privately held company that offers software, databases, and services aimed at understanding gene regulation at the molecular level representing a central part of systems biology. Its multilayer integrative approach is a working implementation of systems biology principles. Genomatix combines sequence analysis, functional promoter analysis, proprietary genome annotation, promoter sequence databases, comparative genomics, scientific literature data mining, pathway databases, biological network databases, pathway analysis, network analysis, and expression profiling into working solutions and pipelines. It also enables better understanding of biological mechanisms under different conditions and stimuli in the biological context of your data. Some of Genomatix" most valuable assets are the strong scientific background and the years of experience in research & discovery as well as in development & application of scientific software. Their firsthand knowledge of all the complexities involved in the in-silico analysis of biological data makes them a first-rate partner for all scientific projects involving the evaluation of gene regulatory mechanisms. The Genomatix team has more than a decade of scientific expertise in the successful application of computer aided analysis of gene regulatory networks, which is reflected by more than 150 peer reviewed scientific publications from Genomatix" scientists More than 35,000 researchers in industry and academia around the world use this technology. The software available in Genomatix are: -GenomatixSuite: GenomatixSuite is our comprehensive software bundle including ElDorado, Gene2Promoter, GEMS Launcher, MatInspector and MatBase. GenomatixSuite PE also includes BiblioSphere Pathway Edition. Chromatin IP Software - RegionMiner: Fast, extensive analysis of genomic regions. - ChipInspector: Discover the real power of your microarray data. Genome Annotation Software - ElDorado: Extended Genome Annotation. -Gene2Promoter: Retrieve & analyze promoters - GPD: The Genomatix Promoter Database,

which is now included with Gene2Promoter. Knowledge Mining Software - BiblioSpere : The next level of pathway/genomics analysis. - LitInspector: Literature and pathway analysis for free. Sequence Analysis Software - GEMS Launcher: Our integrated collection of sequence analysis tools. - MalInspector: Search transcription factor binding sites - MatBase: The transcription factor knowledge base. Other (no registration required) Software - DiAlign: Multiple alignment of DNA/protein sequence. - Genomatix tools: Various small tools for sequence statistics, extraction, formatting, etc.

#### Synonyms: Genomatix

**Resource Type:** short course material, software application, topical portal, database, portal, data or information resource, narrative resource, data analysis software, data processing software, training material, software resource

**Keywords:** effect, expression, functional, gene, genome, alignment, analysis, annotation, biological, cascade, cell, data, dna, in-silico analysis, mechanism, metabolic pathway, microarray, mining, molecular, network, pathway, promoter, protein, region, regulation, scientific, sequence, signaling, software, stimulus, systems biology, technology, text mining, transcription, FASEB list

#### Funding:

**Resource Name:** Genomatix Software: Understanding Gene Regulation

Resource ID: SCR\_008036

Alternate IDs: nif-0000-10236

Old URLs: http://www.genomatix.de/products/index.html

**Record Creation Time:** 20220129T080245+0000

Record Last Update: 20250407T215656+0000

### **Ratings and Alerts**

No rating or validation information has been found for Genomatix Software: Understanding Gene Regulation.

No alerts have been found for Genomatix Software: Understanding Gene Regulation.

Data and Source Information

Source: <u>SciCrunch Registry</u>

**Usage and Citation Metrics** 

We found 793 mentions in open access literature.

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

Chu WK, et al. (2025) Migration of primordial germ cells and their relationship of PGCs with sex development in transgenic germline-specific fluorescent freshwater angelfish (Pterophyllum scalare). Scientific reports, 15(1), 1308.

Suchanski J, et al. (2024) Galactosylceramide Upregulates the Expression of the BCL2 Gene and Downregulates the Expression of TNFRSF1B and TNFRSF9 Genes, Acting as an Anti-Apoptotic Molecule in Breast Cancer Cells. Cancers, 16(2).

Sun X, et al. (2024) Genetic and epigenetic regulation of cortactin (CTTN) by inflammatory factors and mechanical stress in human lung endothelial cells. Bioscience reports, 44(9).

Shen J, et al. (2024) SM22? deficiency: promoting vascular fibrosis via SRF-SMAD3mediated activation of Col1a2 transcription following arterial injury. Research square.

Kaushik P, et al. (2024) miR-198 targets TOPORS: implications for oral squamous cell carcinoma pathogenesis. Frontiers in oncology, 14, 1485802.

Li Y, et al. (2024) CYLD induces high oxidative stress and DNA damage through class I HDACs to promote radiosensitivity in nasopharyngeal carcinoma. Cell death & disease, 15(1), 95.

Houzelstein D, et al. (2024) A conserved NR5A1-responsive enhancer regulates SRY in testis-determination. Nature communications, 15(1), 2796.

Zand H, et al. (2024) TNF-?-Induced NF-?B Alter the Methylation Status of Some Stemness Genes in HT-29 Human Colon Cancer Cell. Advanced biomedical research, 13, 114.

Khambu B, et al. (2023) NRF2 transcriptionally regulates Caspase-11 expression to activate HMGB1 release by Autophagy-deficient hepatocytes. Cell death discovery, 9(1), 270.

Zatovicova M, et al. (2023) ADAM10 mediates shedding of carbonic anhydrase IX ectodomain non?redundantly to ADAM17. Oncology reports, 49(2).

Zhou C, et al. (2023) STRA6 is essential for induction of vascular smooth muscle lineages in human embryonic cardiac outflow tract development. Cardiovascular research, 119(5), 1202.

Witman N, et al. (2023) Placental growth factor exerts a dual function for cardiomyogenesis and vasculogenesis during heart development. Nature communications, 14(1), 5435.

Liu HJ, et al. (2023) mTORC1 upregulates B7-H3/CD276 to inhibit antitumor T cells and drive tumor immune evasion. Nature communications, 14(1), 1214.

Wu Z, et al. (2023) Early activation of inflammatory pathways in UBA1-mutated hematopoietic stem and progenitor cells in VEXAS. Cell reports. Medicine, 4(8), 101160.

Angulo-Aguado M, et al. (2023) Functional analysis of CTLA4 promoter variant and its possible implication in colorectal cancer immunotherapy. Frontiers in medicine, 10, 1160368.

Lassé M, et al. (2023) An integrated organoid omics map extends modeling potential of kidney disease. Nature communications, 14(1), 4903.

Muñoz-Herrera D, et al. (2023) Molecular cloning of the gene promoter encoding the human CaV?2/Stargazin divergent transcript (CACNG2-DT): characterization and regulation by the cAMP-PKA/CREB signaling pathway. Frontiers in physiology, 14, 1286808.

Riva C, et al. (2022) A natural transdifferentiation event involving mitosis is empowered by integrating signaling inputs with conserved plasticity factors. Cell reports, 40(12), 111365.

Menon R, et al. (2022) Glomerular endothelial cell-podocyte stresses and crosstalk in structurally normal kidney transplants. Kidney international, 101(4), 779.

Zeng S, et al. (2022) Aberrant expression of the extracellular matrix component Biglycan regulated by Hedgehog signalling promotes colorectal cancer cell proliferation. Acta biochimica et biophysica Sinica, 54(2), 243.