

Resource Summary Report

Generated by T1D on Jul 30, 2026

Comparative Toxicogenomics Database (CTD)

RRID:SCR_006530

Type: Tool

Proper Citation

Comparative Toxicogenomics Database (CTD) (RRID:SCR_006530)

Resource Information

URL: <http://ctdbase.org/>

Proper Citation: Comparative Toxicogenomics Database (CTD) (RRID:SCR_006530)

Description: A public database that enhances understanding of the effects of environmental chemicals on human health. Integrated GO data and a GO browser add functionality to CTD by allowing users to understand biological functions, processes and cellular locations that are the targets of chemical exposures. CTD includes curated data describing cross-species chemical–gene/protein interactions, chemical–disease and gene–disease associations to illuminate molecular mechanisms underlying variable susceptibility and environmentally influenced diseases. These data will also provide insights into complex chemical–gene and protein interaction networks.

Abbreviations: CTD

Synonyms: CTD - Comparative Toxicogenomics Database

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

Defining Citation: [PMID:16902965](#), [PMID:16675512](#), [PMID:14735110](#), [PMID:12760826](#)

Keywords: environment, chemical, disease, gene, pathway, protein, interaction, animal model, ontology, annotation, toxin, ontology or annotation browser, FASEB list

Funding: Pfizer ;
American Chemistry Council ;
NIEHS ES014065;
NIEHS R01 ES019604;
NCRR P20 RR016463;
NIEHS U24 ES033155

Availability: Free, Freely available

Resource Name: Comparative Toxicogenomics Database (CTD)

Resource ID: SCR_006530

Alternate IDs: OMICS_01578, nif-0000-02683, r3d100011530

Alternate URLs: <http://ctd.mdibl.org>, <https://doi.org/10.17616/R3KS7N>

Record Creation Time: 20220129T080236+0000

Record Last Update: 20260729T044135+0000

Ratings and Alerts

No rating or validation information has been found for Comparative Toxicogenomics Database (CTD).

No alerts have been found for Comparative Toxicogenomics Database (CTD).

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 1188 mentions in open access literature.

Listed below are recent publications. The full list is available at [T1D](#).

Cai S, et al. (2026) Identification and validation of novel inflammatory response-related diagnostic biomarkers in diabetic foot ulcers. *Journal of diabetes investigation*, 17(1), 103.

Zhou P, et al. (2026) Exploring the role of cytochrome P450 family 1 subfamily B member 1 and quercetin in modulating neuropathic pain after spinal cord injury. *Molecular medicine reports*, 33(1).

Chen H, et al. (2026) Dual-pathway mechanism of vanadium-induced hepatotoxicity in ducks: Synergistic crosstalk between glucose homeostasis disruption and NADH/FSP1/COQ10 axis-driven ferroptosis. *International journal of biological sciences*, 22(1), 43.

Luan R, et al. (2026) Pan-cancer multi-omics reveals DCAF7 as an immune-modulating prognostic driver and Wnt/?-catenin activator in hepatocellular carcinoma. *Clinical and translational medicine*, 16(1), e70572.

Xu J, et al. (2026) Dysregulation of Pulpitis Progression Through Modulation of the lncRNA ITGB2-AS1 /miR-1224-5p Axis. *International dental journal*, 76(1), 104027.

Huang L, et al. (2026) New insight into the epidemiological trends of respiratory syncytial virus infection and the underlying anti-respiratory syncytial virus mechanisms of

andrographolide: integrating Global Burden of Disease database, network pharmacological analysis, and in vitro experiments. *Microbiology spectrum*, 14(1), e0234125.

Castresana-Aguirre M, et al. (2025) Computational decoding of cell-cycle phase effects on cancer hallmarks across breast cancer subtypes. *Breast cancer research : BCR*.

Hao L, et al. (2025) A Review of the Therapeutic Potential of Ginseng and Its Bioactive Components in Nonalcoholic Fatty Liver Disease. *Drug design, development and therapy*, 19, 83.

Fan L, et al. (2025) Comprehensive analysis of ceRNA Networks in UCEC: Prognostic and therapeutic implications. *PloS one*, 20(1), e0314314.

Liang C, et al. (2025) Revealing the Impact of Mono(2-ethylhexyl) Phthalate (MEHP) on Prostate Cancer Based on Network Toxicology and Molecular Docking Approaches. *Journal of applied toxicology : JAT*, 45(10), 2078.

Xie P, et al. (2025) TMEM132A: a novel susceptibility gene for lung adenocarcinoma combined with venous thromboembolism identified through comprehensive bioinformatic analysis. *Frontiers in oncology*, 15, 1564114.

Cheng S, et al. (2025) Exploring hypoxia-related genes in spinal cord injury: a pathway to new therapeutic targets. *Frontiers in molecular neuroscience*, 18, 1565430.

Choi YJ, et al. (2025) Ameliorative Effect of Heat-Killed *Lactiplantibacillus plantarum* Q1 (LPQ1) on Lipid Accumulation: Integration of Network Pharmacology with In Vitro and In Vivo Experiments. *Journal of microbiology and biotechnology*, 35, e2503038.

Song Z, et al. (2025) Mechanistic insights into the anti-depressant effect of quercetin: an integrated bibliometrics, bioinformatics, and animal experimentation. *Frontiers in nutrition*, 12, 1612746.

Wei Z, et al. (2025) Association Between Per- and Polyfluoroalkyl Substances and All-Cause Mortality in Diabetic Patients: Insights from a National Cohort Study and Toxicogenomic Analysis. *Toxics*, 13(3).

Li J, et al. (2025) The protective effect of naringenin on ulcerative colitis in mice through increasing Nrf2 pathway activity. *Acta biochimica et biophysica Sinica*, 57(7), 1068.

Chen T, et al. (2025) Investigating ferroptosis-related genes NFE2L2 in neutrophils for ankylosing spondylitis: therapeutic potential of cassia twigs. *Scientific reports*, 15(1), 8233.

Tao Y, et al. (2025) Homopplantagin inhibits the progression of ulcerative colitis in mice by regulating the MMP9-RLN2 signaling axis. *Frontiers in medicine*, 12, 1582066.

Cao C, et al. (2025) Identifying pyroptosis-related prognostic genes in the co-occurrence of lung adenocarcinoma and COPD via bioinformatics analysis. *Scientific reports*, 15(1), 15228.

Wan S, et al. (2025) Proteomic signatures and predictive modeling of cadmium-associated anxiety in middle-aged and elderly populations: an environmental exposure association study. *Journal of translational medicine*, 23(1), 499.