

Resource Summary Report

Generated by [Kravitz](#) on Sep 10, 2026

Chemical Effects in Biological Systems (CEBS)

RRID:SCR_006778

Type: Tool

Proper Citation

Chemical Effects in Biological Systems (CEBS) (RRID:SCR_006778)

Resource Information

URL: <http://cebs.niehs.nih.gov>

Proper Citation: Chemical Effects in Biological Systems (CEBS) (RRID:SCR_006778)

Description: Repository for toxicogenomics data, including study design and timeline, clinical chemistry and histopathology findings and microarray and proteomics data. Data derived from studies of chemicals and of genetic alterations, and is compatible with clinical and environmental studies. Data relating to environmental health, pharmacology, and toxicology. It is not necessary to have microarray data, but study design and phenotypic anchoring data are required. CEBS contains raw microarray data collected in accordance with MIAME guidelines and provides tools for data selection, pre-processing and analysis resulting in annotated lists of genes of interest. Biomedical Investigation Database is another component of CEBS system. used to load and curate study data prior to export to CEBS, in addition to capturing and displaying novel data types such as PCR data, or additional fields of interest, including those defined by the HESI Toxicogenomics Committee. BID has been shared with Health Canada and the US Environmental Protection Agency.

Abbreviations: CEBS

Synonyms: CEBS, Chemical Effects in Biological Systems (CEBS), Chemical Effects in Biological Systems

Resource Type: data or information resource, data repository, database, service resource, storage service resource

Defining Citation: [PMID:17962311](#)

Keywords: caenorhabditis elegans, chemical study, microarray, genetic alteration, toxicogenomics, environmental health, study design, timeline, clinical chemistry, histopathology, proteomics, chemical, clinical, microarray hybridization, gel image, phenotype, pharmacology, toxicology

Funding: NIEHS ;
NIGMS

Availability: Free, Freely available

Resource Name: Chemical Effects in Biological Systems (CEBS)

Resource ID: SCR_006778

Alternate IDs: nif-0000-02649, r3d100010314

Alternate URLs: <https://doi.org/10.17616/R3W02M>

Record Creation Time: 20220129T080238+0000

Record Last Update: 20260905T132601+0000

Ratings and Alerts

No rating or validation information has been found for Chemical Effects in Biological Systems (CEBS).

No alerts have been found for Chemical Effects in Biological Systems (CEBS).

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 19 mentions in open access literature.

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

Kuo B, et al. (2022) Comprehensive interpretation of in vitro micronucleus test results for 292 chemicals: from hazard identification to risk assessment application. Archives of toxicology, 96(7), 2067.

Hubbard TD, et al. (2020) Butylparaben multigenerational reproductive assessment by continuous breeding in Hsd:Sprague Dawley SD rats following dietary exposure. Reproductive toxicology (Elmsford, N.Y.), 96, 258.

Huang SH, et al. (2020) Identification of Time-Invariant Biomarkers for Non-Genotoxic Hepatocarcinogen Assessment. International journal of environmental research and public health, 17(12).

Jin X, et al. (2018) Meloxicam increases epidermal growth factor receptor expression improving survival after hepatic resection in diet-induced obese mice. Surgery, 163(6), 1264.

Ratnayake R, et al. (2016) Assessment of Community Event-Based Surveillance for Ebola Virus Disease, Sierra Leone, 2015. *Emerging infectious diseases*, 22(8), 1431.

Cherkas Y, et al. (2016) ABC gene-ranking for prediction of drug-induced cholestasis in rats. *Toxicology reports*, 3, 252.

Stamper BD, et al. (2015) p53 Contributes to Differentiating Gene Expression Following Exposure to Acetaminophen and Its Less Hepatotoxic Regioisomer Both In Vitro and In Vivo. *Gene regulation and systems biology*, 9, 1.

Hendrickx DM, et al. (2014) Workshop report: Identifying opportunities for global integration of toxicogenomics databases, 26-27 June 2013, Research Triangle Park, NC, USA. *Archives of toxicology*, 88(12), 2323.

Tice RR, et al. (2013) Improving the human hazard characterization of chemicals: a Tox21 update. *Environmental health perspectives*, 121(7), 756.

Dawe AS, et al. (2012) DESTAF: a database of text-mined associations for reproductive toxins potentially affecting human fertility. *Reproductive toxicology* (Elmsford, N.Y.), 33(1), 99.

Backus GS, et al. (2010) Protective role of interleukin-10 in ozone-induced pulmonary inflammation. *Environmental health perspectives*, 118(12), 1721.

Chen M, et al. (2009) ebTrack: an environmental bioinformatics system built upon ArrayTrack. *BMC proceedings*, 3 Suppl 2(Suppl 2), S5.

Bauer AK, et al. (2009) Transcriptomic analysis of pathways regulated by toll-like receptor 4 in a murine model of chronic pulmonary inflammation and carcinogenesis. *Molecular cancer*, 8, 107.

Collings FB, et al. (2008) Novel technologies for the discovery and quantitation of biomarkers of toxicity. *Toxicology*, 245(3), 167.

Lobenhofer EK, et al. (2008) Gene expression response in target organ and whole blood varies as a function of target organ injury phenotype. *Genome biology*, 9(6), R100.

Lettieri T, et al. (2006) Recent applications of DNA microarray technology to toxicology and ecotoxicology. *Environmental health perspectives*, 114(1), 4.

Knudsen KB, et al. (2005) Data input module for Birth Defects Systems Manager. *Reproductive toxicology* (Elmsford, N.Y.), 20(3), 369.

Balbus JM, et al. (2005) Ushering in the new toxicology: toxicogenomics and the public interest. *Environmental health perspectives*, 113(7), 818.

Bates MN, et al. (2005) Workgroup report: Biomonitoring study design, interpretation, and communication--lessons learned and path forward. *Environmental health perspectives*, 113(11), 1615.