Resource Summary Report

Generated by NIF on May 19, 2025

ChemBank

RRID:SCR_007592
Type: Tool

Proper Citation

ChemBank (RRID:SCR_007592)

Resource Information

URL: https://data.broadinstitute.org/chembank/assay

Proper Citation: ChemBank (RRID:SCR_007592)

Description: ChemBank is a public, web-based informatics environment that includes freely available data derived from small molecules and small-molecule screens, and resources for studying the data so that biological and medical insights can be gained. ChemBank is intended to guide chemists synthesizing novel compounds or libraries, to assist biologists searching for small molecules that perturb specific biological pathways, and to catalyze the process by which drug hunters discover new and effective medicines. ChemBank stores an increasingly varied set of cell measurements derived from, among other biological objects, cell lines treated with small molecules. Analysis tools are available and are being developed that allow the relationships between cell states, cell measurements and small molecules to be determined. Currently, ChemBank stores information on hundreds of thousands of small molecules and hundreds of biomedically relevant assays that have been performed at the ICG in collaborations involving biomedical researchers worldwide. These scientists have agreed to perform their experiments in an open data-sharing environment. The goals of ChemBank are to provide life scientists unfettered access to biomedically relevant data and tools heretofore available almost exclusively in the private sector. We intend for ChemBank to be a planning and discovery tool for chemists, biologists, and drug hunters anywhere, with the only necessities being a computer, access to the Internet, and a desire to extract knowledge from public experiments whose greatest value is likely to reside in their collective sum.

Synonyms: ChemBank

Resource Type: database, data or information resource

Defining Citation: PMID:17947324

Keywords: drug discovery, assay, biomedical, medicine, novel compound, novel drug, pharmaceutical, small molecule, small-molecule screen

Funding:

Resource Name: ChemBank

Resource ID: SCR_007592

Alternate IDs: nif-0000-02656

Old URLs: http://chembank.broad.harvard.edu

Record Creation Time: 20220129T080242+0000

Record Last Update: 20250517T055828+0000

Ratings and Alerts

No rating or validation information has been found for ChemBank.

No alerts have been found for ChemBank.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 33 mentions in open access literature.

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

Trithavisup T, et al. (2024) Impact of Wooden Breast myopathy on in vitro protein digestibility, metabolomic profile, and cell cytotoxicity of cooked chicken breast meat. Poultry science, 103(1), 103261.

Tian X, et al. (2024) Integrated Transcriptomic and Metabolomic Analysis Reveals Possible Molecular Mechanisms of Leaf Growth and Development in Disanthus cercidifolius var. longipes. Metabolites, 14(12).

Zhu C, et al. (2024) The gap-free genome and multi-omics analysis of Citrus reticulata 'Chachi' reveal the dynamics of fruit flavonoid biosynthesis. Horticulture research, 11(8), uhae177.

Zhang L, et al. (2024) Metabolomics Characterization of Phenolic Compounds in Colored Quinoa and Their Relationship with In Vitro Antioxidant and Hypoglycemic Activities. Molecules (Basel, Switzerland), 29(7).

Wong SC, et al. (2023) Inhibition of CDCP1 by 8-isopentenylnaringenin synergizes with EGFR inhibitors in lung cancer treatment. Molecular oncology.

Liu H, et al. (2023) Analysis of Metabolites and Metabolic Pathways of Three Chinese Jujube Cultivar. Metabolites, 13(6).

Yoon CK, et al. (2023) Vitreous Fatty Amides and Acyl Carnitines Are Altered in Intermediate Age-Related Macular Degeneration. Investigative ophthalmology & visual science, 64(3), 28.

Cavalluzzi MM, et al. (2022) Microwave-Assisted Extraction of Bioactive Compounds from Lentil Wastes: Antioxidant Activity Evaluation and Metabolomic Characterization. Molecules (Basel, Switzerland), 27(21).

Angelis E, et al. (2021) Optimization of an Untargeted DART-HRMS Method Envisaging Identification of Potential Markers for Saffron Authenticity Assessment. Foods (Basel, Switzerland), 10(6).

Costa R, et al. (2021) A drug screen with approved compounds identifies amlexanox as a novel Wnt/?-catenin activator inducing lung epithelial organoid formation. British journal of pharmacology, 178(19), 4026.

Akum FN, et al. (2021) Identification of Collimonas gene loci involved in the biosynthesis of a diffusible secondary metabolite with broad-spectrum antifungal activity and plant-protective properties. Microbial biotechnology, 14(4), 1367.

Li S, et al. (2021) Widely Targeted Metabolomics Analysis of Different Parts of Salsola collina Pall. Molecules (Basel, Switzerland), 26(4).

Mori M, et al. (2020) Towards the Inhibition of Protein-Protein Interactions (PPIs) in STAT3: Insights into a New Class of Benzothiadiazole Derivatives. Molecules (Basel, Switzerland), 25(15).

Kumar R, et al. (2019) Exploring the new horizons of drug repurposing: A vital tool for turning hard work into smart work. European journal of medicinal chemistry, 182, 111602.

Gagic Z, et al. (2019) In silico Methods for Design of Kinase Inhibitors as Anticancer Drugs. Frontiers in chemistry, 7, 873.

Kaushik AC, et al. (2018) Structure Based Virtual Screening Studies to Identify Novel Potential Compounds for GPR142 and Their Relative Dynamic Analysis for Study of Type 2

Diabetes. Frontiers in chemistry, 6, 23.

Jin D, et al. (2018) The antineoplastic drug metformin downregulates YAP by interfering with IRF-1 binding to the YAP promoter in NSCLC. EBioMedicine, 37, 188.

Mazoure B, et al. (2017) Identification and correction of spatial bias are essential for obtaining quality data in high-throughput screening technologies. Scientific reports, 7(1), 11921.

Iwata M, et al. (2017) Elucidating the modes of action for bioactive compounds in a cell-specific manner by large-scale chemically-induced transcriptomics. Scientific reports, 7, 40164.

Veljkovic V, et al. (2017) A simple method for calculation of basic molecular properties of nutrients and their use as a criterion for a healthy diet. F1000Research, 6, 13.