

Resource Summary Report

Generated by FDI Lab - SciCrunch.org on Apr 22, 2025

SuperTarget

RRID:SCR_002696

Type: Tool

Proper Citation

SuperTarget (RRID:SCR_002696)

Resource Information

URL: http://bioinf-apache.charite.de/supertarget_v2/

Proper Citation: SuperTarget (RRID:SCR_002696)

Description: Database for analyzing drug-target interactions, it integrates drug-related information associated with medical indications, adverse drug effects, drug metabolism, pathways and Gene Ontology (GO) terms for target proteins. At present (May 2013), the updated database contains >6000 target proteins, which are annotated with >330 000 relations to 196 000 compounds (including approved drugs); the vast majority of interactions include binding affinities and pointers to the respective literature sources. The user interface provides tools for drug screening and target similarity inclusion. A query interface enables the user to pose complex queries, for example, to find drugs that target a certain pathway, interacting drugs that are metabolized by the same cytochrome P450 or drugs that target proteins within a certain affinity range.

Abbreviations: SuperTarget

Resource Type: data or information resource, database

Defining Citation: [PMID:22067455](https://pubmed.ncbi.nlm.nih.gov/22067455/), [PMID:17942422](https://pubmed.ncbi.nlm.nih.gov/17942422/)

Keywords: drug metabolism, drug, cytochrome p450, ontology, pathway, target, compound, cytochrome, drug target, protein, side effect, protein-protein interaction

Funding: BMBF MedSys 0315450A;
DFG RTG Computational Systems Biology GRK1772;
DFG IRTG Systems Biology of Molecular Networks GRK1360;
European Union SynSys ;
NIGMS GM070064

Availability: Creative Commons Attribution-NonCommercial-ShareAlike License, v3
Unported

Resource Name: SuperTarget

Resource ID: SCR_002696

Alternate IDs: nif-0000-00416, OMICS_01591

Alternate URLs: <http://bioinf-tomcat.charite.de/supertarget/>,
<http://bioinformatics.charite.de/supertarget>

Record Creation Time: 20220129T080214+0000

Record Last Update: 20250422T055038+0000

Ratings and Alerts

No rating or validation information has been found for SuperTarget.

No alerts have been found for SuperTarget.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 28 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Ji H, et al. (2024) The impact of quercetin and paclitaxel combination on ovarian cancer cells. *iScience*, 27(8), 110434.

Lin S, et al. (2024) Network pharmacology and experimental verification unraveled the mechanism of Bailing Capsule against asthma. *Medicine*, 103(44), e40391.

Zhong Y, et al. (2023) Exploring the Mechanisms of Modified Bu-Shen-Yi-Qi Decoction for COPD-Related Osteoporosis Therapy via Transcriptomics and Network Pharmacology

Approach. Drug design, development and therapy, 17, 2727.

Binatl? OC, et al. (2023) MOKPE: drug-target interaction prediction via manifold optimization based kernel preserving embedding. BMC bioinformatics, 24(1), 276.

Pan J, et al. (2021) Prediction of Drug-Target Interactions by Combining Dual-Tree Complex Wavelet Transform with Ensemble Learning Method. Molecules (Basel, Switzerland), 26(17).

Thafar MA, et al. (2021) DTi2Vec: Drug-target interaction prediction using network embedding and ensemble learning. Journal of cheminformatics, 13(1), 71.

Wang A, et al. (2021) Drug-Target Interaction Prediction via Dual Laplacian Graph Regularized Logistic Matrix Factorization. BioMed research international, 2021, 5599263.

Wang C, et al. (2021) Predicting Drug-Target Interactions Based on the Ensemble Models of Multiple Feature Pairs. International journal of molecular sciences, 22(12).

Liu DY, et al. (2021) Drug Repurposing for COVID-19 Treatment by Integrating Network Pharmacology and Transcriptomics. Pharmaceutics, 13(4).

Tang C, et al. (2020) Drug-target interactions prediction using marginalized denoising model on heterogeneous networks. BMC bioinformatics, 21(1), 330.

Rayhan F, et al. (2020) FRnet-DTI: Deep convolutional neural network for drug-target interaction prediction. Heliyon, 6(3), e03444.

Wang YB, et al. (2020) A deep learning-based method for drug-target interaction prediction based on long short-term memory neural network. BMC medical informatics and decision making, 20(Suppl 2), 49.

Li Y, et al. (2019) Drug-Target Interaction Prediction Based on Drug Fingerprint Information and Protein Sequence. Molecules (Basel, Switzerland), 24(16).

Ban T, et al. (2019) NRLMF?: Beta-distribution-rescored neighborhood regularized logistic matrix factorization for improving the performance of drug-target interaction prediction. Biochemistry and biophysics reports, 18, 100615.

Wang M, et al. (2018) Drug-Target Interaction Prediction via Dual Laplacian Graph Regularized Matrix Completion. BioMed research international, 2018, 1425608.

Durán C, et al. (2018) Pioneering topological methods for network-based drug-target prediction by exploiting a brain-network self-organization theory. Briefings in bioinformatics, 19(6), 1183.

Hao M, et al. (2018) A new chemoinformatics approach with improved strategies for effective predictions of potential drugs. Journal of cheminformatics, 10(1), 50.

Li H, et al. (2017) Investigating the Mechanisms of Action of Depside Salt from Salvia miltiorrhiza Using Bioinformatic Analysis. Evidence-based complementary and alternative

medicine : eCAM, 2017, 5671860.

Huang C, et al. (2017) Large-scale cross-species chemogenomic platform proposes a new drug discovery strategy of veterinary drug from herbal medicines. PloS one, 12(9), e0184880.

Meng FR, et al. (2017) Prediction of Drug-Target Interaction Networks from the Integration of Protein Sequences and Drug Chemical Structures. Molecules (Basel, Switzerland), 22(7).