Resource Summary Report

Generated by NIF on Apr 18, 2025

Pathway Commons

RRID:SCR_002103
Type: Tool

Proper Citation

Pathway Commons (RRID:SCR_002103)

Resource Information

URL: http://www.pathwaycommons.org/pc

Proper Citation: Pathway Commons (RRID:SCR_002103)

Description: Database of publicly available pathways from multiple organisms and multiple sources represented in a common language. Pathways include biochemical reactions, complex assembly, transport and catalysis events, and physical interactions involving proteins, DNA, RNA, small molecules and complexes. Pathways were downloaded directly from source databases. Each source pathway database has been created differently, some by manual extraction of pathway information from the literature and some by computational prediction. Pathway Commons provides a filtering mechanism to allow the user to view only chosen subsets of information, such as only the manually curated subset. The quality of Pathway Commons pathways is dependent on the quality of the pathways from source databases. Pathway Commons aims to collect and integrate all public pathway data available in standard formats. It currently contains data from nine databases with over 1,668 pathways, 442,182 interactions,414 organisms and will be continually expanded and updated. (April 2013)

Abbreviations: PC

Resource Type: database, data or information resource, software resource, web service, data access protocol

Defining Citation: PMID:21071392

Keywords: biological pathway, pathway, molecule, biopax, standard exchange format, bio.tools

Funding: NHGRI P41HG004118;

NIGMS 2R01GM070743-06;
NIGMS 1T32 GM083937;
Cancer Biomedical Informatics Grid

Availability: Public, Free, Under the license terms of each contributing database.

Resource Name: Pathway Commons

Resource ID: SCR_002103

Alternate IDs: nif-0000-20884, biotools:PathwayCommons_web_service_API

Alternate URLs: https://bio.tools/PathwayCommons_web_service_API

Record Creation Time: 20220129T080211+0000

Record Last Update: 20250418T054955+0000

Ratings and Alerts

No rating or validation information has been found for Pathway Commons.

No alerts have been found for Pathway Commons.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 14 mentions in open access literature.

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

Qiang J, et al. (2020) Clustering Sparse Data With Feature Correlation With Application to Discover Subtypes in Cancer. IEEE access : practical innovations, open solutions, 8, 67775.

Huang JK, et al. (2018) Systematic Evaluation of Molecular Networks for Discovery of Disease Genes. Cell systems, 6(4), 484.

Himmelstein DS, et al. (2017) Systematic integration of biomedical knowledge prioritizes drugs for repurposing. eLife, 6.

Frantzi M, et al. (2014) Clinical proteomic biomarkers: relevant issues on study design & technical considerations in biomarker development. Clinical and translational medicine, 3(1), 7.

Wang J, et al. (2013) WEB-based GEne SeT AnaLysis Toolkit (WebGestalt): update 2013. Nucleic acids research, 41(Web Server issue), W77.

Kirouac DC, et al. (2012) Creating and analyzing pathway and protein interaction compendia for modelling signal transduction networks. BMC systems biology, 6, 29.

Montresor A, et al. (2012) Chemokines and the signaling modules regulating integrin affinity. Frontiers in immunology, 3, 127.

Milanowska K, et al. (2011) Databases and bioinformatics tools for the study of DNA repair. Molecular biology international, 2011, 475718.

Galperin MY, et al. (2011) The 2011 Nucleic Acids Research Database Issue and the online Molecular Biology Database Collection. Nucleic acids research, 39(Database issue), D1.

Fortney K, et al. (2011) Integrative computational biology for cancer research. Human genetics, 130(4), 465.

Kleinstreuer NC, et al. (2011) Environmental impact on vascular development predicted by high-throughput screening. Environmental health perspectives, 119(11), 1596.

Kraeutler MJ, et al. (2010) Modeling cardiac ?-adrenergic signaling with normalized-Hill differential equations: comparison with a biochemical model. BMC systems biology, 4, 157.

Schaefer CF, et al. (2009) PID: the Pathway Interaction Database. Nucleic acids research, 37(Database issue), D674.

Pico AR, et al. (2008) WikiPathways: pathway editing for the people. PLoS biology, 6(7), e184.