Resource Summary Report

Generated by NIF on Apr 25, 2025

MBRole

RRID:SCR_014684
Type: Tool

Proper Citation

MBRole (RRID:SCR_014684)

Resource Information

URL: http://csbg.cnb.csic.es/mbrole/

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Description: Software program for overrepresentation (enrichment) analysis of categorical annotations for a set of compounds. These categorical annotations correspond to biological and chemical information found in public databases and software. Annotations can be biological (pathways, enzyme interactions, pharmacological action) or chemical (taxonomy and chemical groups).

Resource Type: web application, software resource, software application, data analysis software, data processing software

Defining Citation: PMID:21208985

Keywords: metabolomics, metabolomics tool, overrepresentation analysis, enrichment analysis, chemical annotation, biological annotation, enzyme interactions, pharmacological action, chemical taxonomy, data analysis, software, FASEB list

Funding:

Availability: Freely available

Resource Name: MBRole

Resource ID: SCR_014684

Record Creation Time: 20220129T080321+0000

Record Last Update: 20250425T060027+0000

Ratings and Alerts

No rating or validation information has been found for MBRole.

No alerts have been found for MBRole.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 83 mentions in open access literature.

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

Hua Y, et al. (2025) Metabonomics and physiology revealed the critical function of 5-Phosphoribosylamine and antioxidant enzymes in enhancing aged oat seed germination. BMC plant biology, 25(1), 28.

Majzoub ME, et al. (2024) Refining microbial community metabolic models derived from metagenomics using reference-based taxonomic profiling. mSystems, 9(9), e0074624.

Zhong C, et al. (2024) Metabolomics reveals changes in soil metabolic profiles during vegetation succession in karst area. Frontiers in microbiology, 15, 1337672.

Cao R, et al. (2024) Disordered Gut Microbiome and Alterations in Metabolic Patterns Are Associated With Hypertensive Left Ventricular Hypertrophy. Journal of the American Heart Association, 13(19), e034230.

Zhou X, et al. (2024) Biomarker identification and risk assessment of cardiovascular disease based on untargeted metabolomics and machine learning. Scientific reports, 14(1), 25755.

Devasahayam Arokia Balaya R, et al. (2024) Role of Hemigraphis alternata in wound healing: metabolomic profiling and molecular insights into mechanisms. Scientific reports, 14(1), 3872.

Zhang YZ, et al. (2024) Metabolic profiling of idiopathic pulmonary fibrosis in a mouse model: implications for pathogenesis and biomarker discovery. Frontiers in medicine, 11, 1410051.

Liu F, et al. (2024) Effects of taurine on metabolomics of bovine mammary epithelial cells under high temperature conditions. Frontiers in veterinary science, 11, 1393276.

Qi L, et al. (2024) Microbiome-metabolome analysis insight into the effects of high-salt diet on hemorheological functions in SD rats. Frontiers in nutrition, 11, 1408778.

Andrade FFD, et al. (2024) Leishmania (Sauroleishmania) tarentolae versus pathogenic

species: comparative evaluation of protease activity, glycoconjugates, resistance to complement and metabolome composition. Memorias do Instituto Oswaldo Cruz, 119, e230243.

Hong Y, et al. (2024) NAD+ deficiency primes defense metabolism via 1O2-escalated jasmonate biosynthesis in plants. Nature communications, 15(1), 6652.

Chang Y, et al. (2024) Metabolic Characteristics and Discriminative Diagnosis of Growth Hormone Deficiency and Idiopathic Short Stature in Preadolescents and Adolescents. Molecules (Basel, Switzerland), 29(7).

Abdik E, et al. (2024) Transcriptome-based biomarker prediction for Parkinson's disease using genome-scale metabolic modeling. Scientific reports, 14(1), 585.

Majzoub ME, et al. (2024) The phageome of patients with ulcerative colitis treated with donor fecal microbiota reveals markers associated with disease remission. Nature communications, 15(1), 8979.

Wang Y, et al. (2023) Spatio-temporal transcriptome dynamics coordinate rapid transition of core crop functions in 'lactating' pigeon. PLoS genetics, 19(6), e1010746.

Wang F, et al. (2023) Analysis of serum metabolism in premature infants before and after feeding using GC-MS and the relationship with necrotizing enterocolitis. Biomedical chromatography : BMC, 37(1), e5505.

Li Y, et al. (2023) Metabolic classification suggests the GLUT1/ALDOB/G6PD axis as a therapeutic target in chemotherapy-resistant pancreatic cancer. Cell reports. Medicine, 4(9), 101162.

Figueiredo G, et al. (2023) Linking Pedobacter lusitanus NL19 volatile exometabolome with growth medium composition: what can we learn using comprehensive two-dimensional gas chromatography coupled to time-of-flight mass spectrometry? Analytical and bioanalytical chemistry, 415(13), 2613.

Yelamanchi SD, et al. (2022) Rifampicin-Mediated Metabolic Changes in Mycobacterium tuberculosis. Metabolites, 12(6).

Yang LY, et al. (2022) Subcellular-Level Mitochondrial Energy Metabolism Response in the Fat Body of the German Cockroach Fed Abamectin. Insects, 13(12).