Resource Summary Report

Generated by NIF on Apr 19, 2025

MitoMiner

RRID:SCR_001368 Type: Tool

Proper Citation

MitoMiner (RRID:SCR_001368)

Resource Information

URL: http://mitominer.mrc-mbu.cam.ac.uk/

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Description: A database of mitochondrial proteomics data. It includes two sets of proteins: the MitoMiner Reference Set, which has 10477 proteins from 12 species; and MitoCarta, which has 2909 proteins from mouse and human mitochondrial proteins. MitoMiner provides annotation from the Gene Ontology (GO) and UniProt databases. This reference set contains all proteins that are annotated by either of these resources as mitochondrial in any of the species included in MitoMiner. MitoMiner data via is available via Application Programming Interface (API). The client libraries are provided in Perl, Python, Ruby and Java.

Synonyms: MitoMiner - A database of the mitochondrial proteome

Resource Type: database, data or information resource

Defining Citation: PMID:22121219, PMID:19208617

Keywords: mitochondrion, proteomics, function, homolog, proteome, protein expression, mass-spectrometry, protein, metabolism, green fluorescent protein tag, ortholog, FASEB list

Funding: MRC

Availability: Public, Acknowledgement requested, Code:, GNU Lesser General Public License

Resource Name: MitoMiner

Resource ID: SCR_001368

Alternate IDs: nlx_152504

Record Creation Time: 20220129T080207+0000

Record Last Update: 20250412T054620+0000

Ratings and Alerts

No rating or validation information has been found for MitoMiner.

No alerts have been found for MitoMiner.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 73 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>NIF</u>.

Gao C, et al. (2025) Regulation of reactive oxygen species and the role of mitochondrial apoptotic-related genes in rheumatoid arthritis. Scientific reports, 15(1), 2165.

Chen N, et al. (2025) KMO-driven metabolic reconfiguration and its impact on immune cell infiltration in nasopharyngeal carcinoma: a new avenue for immunotherapy. Cancer immunology, immunotherapy : CII, 74(3), 75.

Luo T, et al. (2024) Association between de novo variants of nuclear-encoded mitochondrialrelated genes and undiagnosed developmental disorder and autism. QJM : monthly journal of the Association of Physicians, 117(4), 269.

Wang M, et al. (2024) Characterization of mitochondrial metabolism related molecular subtypes and immune infiltration in colorectal adenocarcinoma. Scientific reports, 14(1), 24326.

Son G, et al. (2024) miR-124 coordinates metabolic regulators acting at early stages of human neurogenesis. Communications biology, 7(1), 1393.

Yunyun Z, et al. (2024) Explore the expression of mitochondria-related genes to construct prognostic risk model for ovarian cancer and validate it, so as to provide optimized treatment for ovarian cancer. Frontiers in immunology, 15, 1458264.

Yuan H, et al. (2024) Protein truncating variants in mitochondrial-related nuclear genes and the risk of chronic liver disease. BMC medicine, 22(1), 239.

Johnson GA, et al. (2024) Mechanisms contributing to inhibition of retinal ganglion cell death by cell permeable peptain-1 under glaucomatous stress. Cell death discovery, 10(1), 305.

Singh N, et al. (2023) Why Don't More Mitochondrial Diseases Exhibit Cardiomyopathy? Journal of cardiovascular development and disease, 10(4).

Gonzalez B, et al. (2023) High-throughput sequencing analysis of nuclear-encoded mitochondrial genes reveals a genetic signature of human longevity. GeroScience, 45(1), 311.

Dong J, et al. (2023) Mitochondria-Related Transcriptome Characterization Associated with the Immune Microenvironment, Therapeutic Response and Survival Prediction in Pancreatic Cancer. International journal of molecular sciences, 24(4).

Novák LVF, et al. (2023) Genomics of Preaxostyla Flagellates Illuminates the Path Towards the Loss of Mitochondria. PLoS genetics, 19(12), e1011050.

Sheng N, et al. (2023) Scutellarin Rescued Mitochondrial Damage through Ameliorating Mitochondrial Glucose Oxidation via the Pdk-Pdc Axis. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 10(32), e2303584.

Bayne AN, et al. (2023) MTSviewer: A database to visualize mitochondrial targeting sequences, cleavage sites, and mutations on protein structures. PloS one, 18(4), e0284541.

Wang Y, et al. (2023) A mitochondrial function-related LncRNA signature predicts prognosis and immune microenvironment for breast cancer. Scientific reports, 13(1), 3918.

Shao Z, et al. (2023) Optimized bisulfite sequencing analysis reveals the lack of 5methylcytosine in mammalian mitochondrial DNA. BMC genomics, 24(1), 439.

Qu JH, et al. (2022) Proteomic Landscape and Deduced Functions of the Cardiac 14-3-3 Protein Interactome. Cells, 11(21).

Smith AJ, et al. (2022) GATD3A, a mitochondrial deglycase with evolutionary origins from gammaproteobacteria, restricts the formation of advanced glycation end products. BMC biology, 20(1), 68.

Lu V, et al. (2022) Glutamine-dependent signaling controls pluripotent stem cell fate. Developmental cell, 57(5), 610.

Dontaine J, et al. (2022) The intra-mitochondrial O-GlcNAcylation system rapidly modulates OXPHOS function and ROS release in the heart. Communications biology, 5(1), 349.