

Resource Summary Report

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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: data or information resource, database

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:

Resource Name: MitoMiner

Resource ID: SCR_001368

Alternate IDs: nlx_152504

License: GNU Lesser General Public License

Record Creation Time: 20220129T080207+0000

Record Last Update: 20260905T133113+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 78 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

Shu Q, et al. (2026) Multi-omics analysis reveals that ginsenoside Rb1 improves prognostic outcomes in sepsis by modulating mitochondrial metabolism MTHFD2 targets. Scientific reports, 16(1), 6880.

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.

Cai Y, et al. (2025) Deciphering mitochondrial dysfunction in keratoconus: Insights into ACSL4 from machine learning-based bulk and single-cell transcriptome analyses and experimental validation. Computational and structural biotechnology journal, 27, 1962.

Wang X, et al. (2025) Nitrate maintains mitochondrial membrane integrity by increasing Sialin-FKBP8 granules via liquid-liquid-phase separation. Redox biology, 88, 103901.

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.

Huang J, et al. (2025) Exploration of effective biomarkers and infiltrating immune cells in metastatic colorectal cancer based on bioinformatics analysis. Scientific reports, 15(1), 33156.

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

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.

- 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.
- 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).
- 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).
- 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.
- 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.
- Nov??k LVF, et al. (2023) Genomics of Preaxostyla Flagellates Illuminates the Path Towards the Loss of Mitochondria. *PLoS genetics*, 19(12), e1011050.
- Wang Y, et al. (2023) A mitochondrial function-related LncRNA signature predicts prognosis and immune microenvironment for breast cancer. *Scientific reports*, 13(1), 3918.
- 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.
- Shao Z, et al. (2023) Optimized bisulfite sequencing analysis reveals the lack of 5-methylcytosine in mammalian mitochondrial DNA. *BMC genomics*, 24(1), 439.