

Resource Summary Report

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MitoCarta

RRID:SCR_018165

Type: Tool

Proper Citation

MitoCarta (RRID:SCR_018165)

Resource Information

URL: <http://www.broadinstitute.org/pubs/MitoCarta/>

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Description: Collection of genes encoding proteins with strong support of mitochondrial localization. Inventory of genes encoding mitochondrial-localized proteins and their expression across 14 mouse tissues. Database is based on human and mouse RefSeq proteins that are mapped to NCBI Gene loci. MitoCarta 2.0 inventory provides molecular framework for system-level analysis of mammalian mitochondria.

Synonyms: MitoCarta2.0

Resource Type: data or information resource, database

Defining Citation: [PMID:26450961](#), [PMID:18614015](#)

Keywords: Gene, protein, mitochondrial protein, protein expression, data, human, mouse, RefSeq protein, analysis, mammalian mitochondria, FASEB list

Funding: NIGMS GM0077465;
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Availability: Free, Freely available

Resource Name: MitoCarta

Resource ID: SCR_018165

Record Creation Time: 20220129T080339+0000

Ratings and Alerts

No rating or validation information has been found for MitoCarta.

No alerts have been found for MitoCarta.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 183 mentions in open access literature.

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

Zhai MR, et al. (2026) Chronic intermittent hypoxia increases Parkinson's disease susceptibility via PPAR γ -mediated lipid droplet-mitochondrial dysfunction. *Theranostics*, 16(5), 2466.

Magnitov MD, et al. (2025) ZNF143 is a transcriptional regulator of nuclear-encoded mitochondrial genes that acts independently of looping and CTCF. *Molecular cell*, 85(1), 24.

Zhu Z, et al. (2025) Principles of cotranslational mitochondrial protein import. *Cell*.

Zhang L, et al. (2025) MTFR2-Mediated Fission Drives Fatty Acid and Mitochondrial Co-Transfer from Hepatic Stellate Cells to Tumor Cells Fueling Oncogenesis. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 12(23), e2416419.

Yuan M, et al. (2025) SLC25A39 identified as a key regulator of hepatocellular carcinoma progression through the mitochondrial ROS-cytochrome c-caspase signaling axis. *Cellular & molecular biology letters*, 30(1), 147.

Bley N, et al. (2025) Inhibition of RNA-binding proteins enhances immunotherapy in ovarian cancer. *Signal transduction and targeted therapy*, 10(1), 419.

Lin Y, et al. (2025) Integrative Analysis of Mitochondrial-Related Genes Reveals Diagnostic Biomarkers and Therapeutic Targets in Acute Pancreatitis. *IET systems biology*, 19(1), e70040.

Yang W, et al. (2025) Impaired mitochondrial metabolism is a critical cancer vulnerability for MYC inhibitors. *Science advances*, 11(29), eadw5228.

Kaur K, et al. (2025) mtKO: A dedicated guide RNA library for mitochondria research. *Proceedings of the National Academy of Sciences of the United States of America*, 122(29), e2502285122.

Gonzalez-Lozano MA, et al. (2025) EndoMAP.v1 charts the structural landscape of human early endosome complexes. *Nature*, 643(8070), 252.

Bahat A, et al. (2025) Ribonucleotide incorporation into mitochondrial DNA drives inflammation. *Nature*, 647(8090), 726.

Wu T, et al. (2025) SH3BP5-driven metabolic-immune crosstalk in DLBCL: a prognostic biomarker and therapeutic target for reshaping immunosuppressive microenvironment. *Journal of translational medicine*, 23(1), 1003.

Liao RG, et al. (2025) A novel mitochondrial-related risk model for predicting prognosis and immune checkpoint blockade therapy response in uterine corpus endometrial carcinoma. *Scientific reports*, 15(1), 1404.

Gonzalez-Lozano MA, et al. (2025) EndoMAP.v1, a Structural Protein Complex Landscape of Human Endosomes. *bioRxiv : the preprint server for biology*.

Alexandre PA, et al. (2025) A high-resolution bovine mitochondrial co-expression network. *Biology open*, 14(2).

Liu Y, et al. (2025) Uncovering potential biomarkers of endometriosis: transcriptomic and single-cell analysis. *Frontiers in medicine*, 12, 1528434.

Lang AE, et al. (2025) Retrograde mitochondrial transport regulates mitochondrial biogenesis in zebrafish neurons. *bioRxiv : the preprint server for biology*.

Morais LH, et al. (2025) The gut microbiome promotes mitochondrial respiration in the brain of a Parkinson's disease mouse model. *NPJ Parkinson's disease*, 11(1), 301.

Wan H, et al. (2025) Exploring the prognostic value of T cell exhaustion and mitochondrial dysfunction related genes in breast cancer through bioinformatics analysis and RT-qPCR validation. *Clinical and experimental medicine*, 25(1), 356.

Xia Y, et al. (2025) Comprehensive analysis of a machine learning prognostic model for the interaction between mitochondrial function and lactylation in lung adenocarcinoma. *Discover oncology*, 16(1), 1990.