

Resource Summary Report

Generated by [NIF](#) on Aug 30, 2026

MitoBreak

RRID:SCR_012949

Type: Tool

Proper Citation

MitoBreak (RRID:SCR_012949)

Resource Information

URL: http://mitobreak.portugene.com/cgi-bin/Mitobreak_home.cgi

Proper Citation: MitoBreak (RRID:SCR_012949)

Description: Database with curated datasets of mitochondrial DNA (mtDNA) rearrangements. Users may submit new mtDNA rearrangements.

Abbreviations: MitoBreak

Resource Type: data or information resource, data repository, database, service resource, storage service resource

Defining Citation: [PMID:24170808](#)

Keywords: mitochondrial dna rearrangement, mitochondrial dna, deletion, duplication, linear, bio.tools

Availability: Free, The community can contribute to this resource

Resource Name: MitoBreak

Resource ID: SCR_012949

Alternate IDs: biotools:mitobreak, OMICS_01640

Alternate URLs: <https://bio.tools/mitobreak>

Record Creation Time: 20220129T080313+0000

Record Last Update: 20260829T182425+0000

Ratings and Alerts

No rating or validation information has been found for MitoBreak.

No alerts have been found for MitoBreak.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 11 mentions in open access literature.

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

Bulduk BK, et al. (2025) High frequency of mitochondrial DNA rearrangements in the peripheral blood of adults with intellectual disability. Journal of intellectual disability research : JIDR, 69(2), 137.

Donato L, et al. (2024) The genomic mosaic of mitochondrial dysfunction: Decoding nuclear and mitochondrial epigenetic contributions to maternally inherited diabetes and deafness pathogenesis. Heliyon, 10(14), e34756.

Lin Y, et al. (2024) HiFi long-read amplicon sequencing for full-spectrum variants of human mtDNA. BMC genomics, 25(1), 538.

Puigr??s M, et al. (2024) Mitochondrial DNA deletions in the cerebrospinal fluid of patients with idiopathic REM sleep behaviour disorder. EBioMedicine, 102, 105065.

Shamanskiy V, et al. (2023) Secondary structure of the human mitochondrial genome affects formation of deletions. BMC biology, 21(1), 103.

Wei W, et al. (2022) Nuclear-embedded mitochondrial DNA sequences in 66,083 human genomes. Nature, 611(7934), 105.

Donato L, et al. (2020) Possible A2E Mutagenic Effects on RPE Mitochondrial DNA from Innovative RNA-Seq Bioinformatics Pipeline. Antioxidants (Basel, Switzerland), 9(11).

Cappa R, et al. (2020) "Mitochondrial Toolbox" - A Review of Online Resources to Explore Mitochondrial Genomics. Frontiers in genetics, 11, 439.

Maldonado EM, et al. (2019) Systems Biology Approaches Toward Understanding Primary Mitochondrial Diseases. Frontiers in genetics, 10, 19.

Kowald A, et al. (2018) Resolving the Enigma of the Clonal Expansion of mtDNA Deletions. Genes, 9(3).

Rajput NK, et al. (2015) Resources, challenges and way forward in rare mitochondrial diseases research. F1000Research, 4, 70.