Resource Summary Report

Generated by dkNET on Apr 19, 2025

Organelle DB

RRID:SCR_007837
Type: Tool

Proper Citation

Organelle DB (RRID:SCR_007837)

Resource Information

URL: http://organelledb.lsi.umich.edu/

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Description: Database of organelle proteins, and subcellular structures / complexes from compiled protein localization data from organisms spanning the eukaryotic kingdom. All data may be downloaded as a tab-delimited text file and new localization data (and localization images, etc) for any organism relevant to the data sets currently contained in Organelle DB is welcomed. The data sets in Organelle DB encompass 138 organisms with emphasis on the major model systems: S. cerevisiae, A. thaliana, D. melanogaster, C. elegans, M. musculus, and human proteins as well. In particular, Organelle DB is a central repository of yeast protein localization data, incorporating results from both previous and current (ongoing) large-scale studies of protein localization in Saccharomyces cerevisiae. In addition, we have manually curated several recent subcellular proteomic studies for incorporation in Organelle DB. In total, Organelle DB is a singular resource consolidating our knowledge of the protein composition of eukaryotic organelles and subcellular structures. When available, we have included terms from the Gene Ontologies: the cellular component, molecular function, and biological process fields are discussed more fully in GO. Additionally, when available, we have included fluorescent micrographs (principally of yeast cells) visualizing the described protein localization. Organelle View is a visualization tool for yeast protein localization. It is a visually engaging way for high school and undergraduate students to learn about genetics or for visually-inclined researchers to explore Organelle DB. By revealing the data through a colorful, dimensional model, we believe that different kinds of information will come to light.

Abbreviations: Organelle DB

Synonyms: Organelle DB: A Database of Organelles and Protein Complexes

Resource Type: data repository, storage service resource, database, d spatial image, image

collection, service resource, data or information resource

Defining Citation: PMID:17130152, PMID:15608270

Keywords: gene, fly, vertebrate, human, mouse, plant, worm, yeast, protein, k-12, organelle, protein localization, function, subcellular structure, protein complex, sequence, annotation, micrograph, visualization, data analysis service

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Availability: Free, Acknowledgement requested

Resource Name: Organelle DB

Resource ID: SCR_007837

Alternate IDs: nif-0000-03226

Record Creation Time: 20220129T080244+0000

Record Last Update: 20250419T055122+0000

Ratings and Alerts

No rating or validation information has been found for Organelle DB.

No alerts have been found for Organelle DB.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 7 mentions in open access literature.

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

Dato L, et al. (2014) Changes in SAM2 expression affect lactic acid tolerance and lactic acid production in Saccharomyces cerevisiae. Microbial cell factories, 13, 147.

Cenik C, et al. (2011) Genome analysis reveals interplay between 5'UTR introns and nuclear mRNA export for secretory and mitochondrial genes. PLoS genetics, 7(4), e1001366.

Pont C, et al. (2011) RNA-seq in grain unveils fate of neo- and paleopolyploidization events

in bread wheat (Triticum aestivum L.). Genome biology, 12(12), R119.

Kim DR, et al. (2011) Differential chromatin proteomics of the MMS-induced DNA damage response in yeast. Proteome science, 9, 62.

Vizeacoumar FJ, et al. (2009) A picture is worth a thousand words: genomics to phenomics in the yeast Saccharomyces cerevisiae. FEBS letters, 583(11), 1656.

Glory E, et al. (2007) Automated subcellular location determination and high-throughput microscopy. Developmental cell, 12(1), 7.

Galperin MY, et al. (2005) The Molecular Biology Database Collection: 2005 update. Nucleic acids research, 33(Database issue), D5.