Resource Summary Report

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DARC - Database for Aligned Ribosomal Complexes

RRID:SCR_006932
Type: Tool

Proper Citation

DARC - Database for Aligned Ribosomal Complexes (RRID:SCR_006932)

Resource Information

URL: http://darcsite.genzentrum.lmu.de/darc/

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Description: A database for aligned ribosomal complexes that provides a resource for directly comparing the structures. A collection of files deposited in the RCSB protein data bank and the Electron Microscopy Data Bank have been aligned so as to make direct comparison of the structures possible. An easy-to-use, searchable interface allows users to access and download >130 cryo-EM maps and >300 atomic models in the format of brix and pdb files, respectively. The aligned coordinate system substantially simplifies direct visualization of conformational changes in the ribosome, such as subunit rotation and head-swiveling, as well as direct comparison of bound ligands, such as antibiotics or translation factors.

Abbreviations: DARC

Synonyms: The DARC site, Database for Aligned Ribosomal Complexes, Database for Aligned Ribosomal Complexes (DARC), DARC site

Resource Type: database, service resource, data or information resource, production service resource, data analysis service, analysis service resource, model

Defining Citation: PMID:22009674

Keywords: ribosomal complex, cryo-electron microscopy, ribosomal particle, atomic model, ribosome, x-ray crystallography, structure, bio.tools

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Resource Name: DARC - Database for Aligned Ribosomal Complexes

Resource ID: SCR_006932

Alternate IDs: biotools:darc_site, nlx_149452

Alternate URLs: https://bio.tools/darc_site

Record Creation Time: 20220129T080238+0000

Record Last Update: 20250429T055126+0000

Ratings and Alerts

No rating or validation information has been found for DARC - Database for Aligned Ribosomal Complexes.

No alerts have been found for DARC - Database for Aligned Ribosomal Complexes.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 26 mentions in open access literature.

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

Martinez FJ, et al. (2024) PvDBPII elicits multiple antibody-mediated mechanisms that reduce growth in a Plasmodium vivax challenge trial. NPJ vaccines, 9(1), 10.

Ishikawa T, et al. (2024) Real-Time Imaging of Single Retinal Cell Apoptosis in a Non-Human Primate Ocular Hypertension Model. Translational vision science & technology, 13(1), 20.

Dickey TH, et al. (2024) Structure-based design of a Plasmodium vivax Duffy-binding protein immunogen focuses the antibody response to functional epitopes. Protein science : a publication of the Protein Society, 33(8), e5095.

Picón-Jaimes YA, et al. (2023) Relationship between Duffy Genotype/Phenotype and Prevalence of Plasmodium vivax Infection: A Systematic Review. Tropical medicine and

infectious disease, 8(10).

Martinez FJ, et al. (2023) Immunogenicity of a Plasmodium vivax vaccine based on the duffy binding protein formulated using adjuvants compatible for use in humans. Scientific reports, 13(1), 13904.

Kläger J, et al. (2021) Renal allograft DARCness in subclinical acute and chronic active ABMR. Transplant international : official journal of the European Society for Organ Transplantation, 34(8), 1494.

Resino S, et al. (2021) TRPM5 rs886277 Polymorphism Predicts Hepatic Fibrosis Progression in Non-Cirrhotic HCV-Infected Patients. Journal of clinical medicine, 10(3).

Corazza P, et al. (2021) Predicting wet age-related macular degeneration (AMD) using DARC (detecting apoptosing retinal cells) AI (artificial intelligence) technology. Expert review of molecular diagnostics, 21(1), 109.

Yamada R, et al. (2021) The relationship between severity of drug problems and perceived interdependence of drug use and sexual intercourse among adult males in drug addiction rehabilitation centers in Japan. Substance abuse treatment, prevention, and policy, 16(1), 5.

Tondnevis F, et al. (2020) Deep Analysis of Residue Constraints (DARC): identifying determinants of protein functional specificity. Scientific reports, 10(1), 1691.

Guo L, et al. (2020) Topical recombinant human Nerve growth factor (rh-NGF) is neuroprotective to retinal ganglion cells by targeting secondary degeneration. Scientific reports, 10(1), 3375.

He WQ, et al. (2019) Antibody responses to Plasmodium vivax Duffy binding and Erythrocyte binding proteins predict risk of infection and are associated with protection from clinical Malaria. PLoS neglected tropical diseases, 13(2), e0006987.

Singh K, et al. (2018) Malaria vaccine candidate based on Duffy-binding protein elicits strain transcending functional antibodies in a Phase I trial. NPJ vaccines, 3, 48.

Sheng Y, et al. (2017) Outlier identification in radiation therapy knowledge-based planning: A study of pelvic cases. Medical physics, 44(11), 5617.

Cordeiro MF, et al. (2017) Real-time imaging of single neuronal cell apoptosis in patients with glaucoma. Brain : a journal of neurology, 140(6), 1757.

Payne RO, et al. (2017) Human vaccination against Plasmodium vivax Duffy-binding protein induces strain-transcending antibodies. JCI insight, 2(12).

Shin WH, et al. (2017) In silico structure-based approaches to discover protein-protein interaction-targeting drugs. Methods (San Diego, Calif.), 131, 22.

Verma A, et al. (2016) eMERGE Phenome-Wide Association Study (PheWAS) identifies clinical associations and pleiotropy for stop-gain variants. BMC medical genomics, 9 Suppl

1(Suppl 1), 32.

Takano A, et al. (2016) Web-Based Cognitive Behavioral Relapse Prevention Program With Tailored Feedback for People With Methamphetamine and Other Drug Use Problems: Development and Usability Study. JMIR mental health, 3(1), e1.

Camargos Costa D, et al. (2015) Plasmodium simium, a Plasmodium vivax-related malaria parasite: genetic variability of Duffy binding protein II and the Duffy antigen/receptor for chemokines. PloS one, 10(6), e0131339.