

Resource Summary Report

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PDB-REDO

RRID:SCR_018936

Type: Tool

Proper Citation

PDB-REDO (RRID:SCR_018936)

Resource Information

URL: <https://pdb-redo.eu/>

Proper Citation: PDB-REDO (RRID:SCR_018936)

Description: Web server for macromolecular structure model optimisation and databank of optimised structure models. Focuses on automating final steps of crystallographic process: optimisation of structure model through refinement, rebuilding, and validation. Can automatically optimise most of crystallographic structure models based on input model and diffraction data. Web server works on user provided data, databank has updated versions of Protein Data Bank entries based on original experimental data that were deposited with atomic coordinates in PDB.

Synonyms: PDB_REDO

Resource Type: data repository, web service, software application, data processing software, storage service resource, data access protocol, service resource, software resource

Defining Citation: [DOI:10.1107/S2052252514009324](https://doi.org/10.1107/S2052252514009324)

Keywords: Macromolecular structure, model optimization, crystallographic process, final step automating, structure model optimization, structure refinement, structure rebuilding, atomic coordinate, PDB

Funding: Netherlands Organization for Scientific Research

Availability: Free, Freely available

Resource Name: PDB-REDO

Resource ID: SCR_018936

License URLs: <https://pdb-redo.eu/license.txt>

Record Creation Time: 20220129T080342+0000

Record Last Update: 20260804T043706+0000

Ratings and Alerts

No rating or validation information has been found for PDB-REDO.

No alerts have been found for PDB-REDO.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 28 mentions in open access literature.

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

Petrides AC, et al. (2025) Reconstructing biological molecules with help from video gamers. *Acta crystallographica. Section D, Structural biology*, 81(Pt 11), 598.

Wlodawer A, et al. (2025) A Critical Look at the Crystal Structures of cAMP-Dependent Protein Kinases. *Kinases and phosphatases*, 3(3).

Costanzo G, et al. (2024) Design, Synthesis, and Evaluation of Novel (-)-cis-N-Normetazocine Derivatives: In Vitro and Molecular Modeling Insights. *Chemical biology & drug design*, 104(6), e70037.

Lushchekina S, et al. (2024) Why is binding of a divalent metal cation to a structural motif containing four carboxylate residues not accompanied by a conformational change? *Protein science : a publication of the Protein Society*, 33(12), e5206.

Zhang R, et al. (2024) Analysis of Tumor-Associated AXIN1 Missense Mutations Identifies Variants That Activate β -Catenin Signaling. *Cancer research*, 84(9), 1443.

Jernigan RJ, et al. (2023) Room-temperature structural studies of SARS-CoV-2 protein NendoU with an X-ray free-electron laser. *Structure (London, England : 1993)*, 31(2), 138.

Hekkelman ML, et al. (2023) AlphaFill: enriching AlphaFold models with ligands and cofactors. *Nature methods*, 20(2), 205.

Ou J, et al. (2023) A yeast-based system to study SARS-CoV-2 Mpro structure and to identify nirmatrelvir resistant mutations. *PLoS pathogens*, 19(8), e1011592.

Gres AT, et al. (2023) Multidisciplinary studies with mutated HIV-1 capsid proteins reveal structural mechanisms of lattice stabilization. *Nature communications*, 14(1), 5614.

Zacharchenko T, et al. (2022) Structural basis of Apt48 inhibition of the BCL6 BTB domain. *Structure (London, England : 1993)*, 30(3), 396.

Qin J, et al. (2022) Structures of PKA-phospholamban complexes reveal a mechanism of familial dilated cardiomyopathy. *eLife*, 11.

van Alderwerelt van Rosenburgh IK, et al. (2022) Biochemical and structural basis for differential inhibitor sensitivity of EGFR with distinct exon 19 mutations. *Nature communications*, 13(1), 6791.

Hassani Nia F, et al. (2022) Structural deficits in key domains of Shank2 lead to alterations in postsynaptic nanoclusters and to a neurodevelopmental disorder in humans. *Molecular psychiatry*.

Pijnenborg JFA, et al. (2021) Fluorinated rhamnosides inhibit cellular fucosylation. *Nature communications*, 12(1), 7024.

de Vries I, et al. (2021) New restraints and validation approaches for nucleic acid structures in PDB-REDO. *Acta crystallographica. Section D, Structural biology*, 77(Pt 9), 1127.

van Tilburg GBA, et al. (2021) K27-Linked Diubiquitin Inhibits UCHL3 via an Unusual Kinetic Trap. *Cell chemical biology*, 28(2), 191.

Rapp M, et al. (2021) Modular basis for potent SARS-CoV-2 neutralization by a prevalent VH1-2-derived antibody class. *Cell reports*, 35(1), 108950.

Zhang SM, et al. (2021) NUDT15-mediated hydrolysis limits the efficacy of anti-HCMV drug ganciclovir. *Cell chemical biology*, 28(12), 1693.

Abdul Rehman SA, et al. (2021) Mechanism of activation and regulation of deubiquitinase activity in MINDY1 and MINDY2. *Molecular cell*, 81(20), 4176.

Postic G, et al. (2021) Representations of protein structure for exploring the conformational space: A speed-accuracy trade-off. *Computational and structural biotechnology journal*, 19, 2618.