

Resource Summary Report

Generated by [FDI Lab - SciCrunch.org](#) on Apr 21, 2025

Structural Antibody Database

RRID:SCR_022096

Type: Tool

Proper Citation

Structural Antibody Database (RRID:SCR_022096)

Resource Information

URL: <http://opig.stats.ox.ac.uk/webapps/newsabdab/sabdab/>

Proper Citation: Structural Antibody Database (RRID:SCR_022096)

Description: Database containing all antibody structures available in the PDB, annotated and presented in consistent fashion. Each structure is annotated with number of properties including experimental details, antibody nomenclature (e.g. heavy-light pairings), curated affinity data and sequence annotations. You can use the database to inspect individual structures, create and download datasets for analysis, search the database for structures with similar sequences to your query, monitor the known structural repertoire of antibodies.

Abbreviations: SAbDab

Resource Type: database, data or information resource

Defining Citation: [DOI:10.1093/nar/gkt1043](https://doi.org/10.1093/nar/gkt1043)

Keywords: antibody structure, annotated structure, Protein Data Bank

Funding: Engineering and Physical Sciences Research Council ;
UCB Pharma ;
Roche GmbH

Availability: Free, Freely available

Resource Name: Structural Antibody Database

Resource ID: SCR_022096

Record Creation Time: 20220421T050138+0000

Record Last Update: 20250420T015703+0000

Ratings and Alerts

No rating or validation information has been found for Structural Antibody Database .

No alerts have been found for Structural Antibody Database .

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 23 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Gordon GL, et al. (2025) PLabDab-nano: a database of camelid and shark nanobodies from patents and literature. Nucleic acids research, 53(D1), D535.

Lee M, et al. (2024) HIV-1-envelope trimer transitions from prefusion-closed to CD4-bound-open conformations through an occluded-intermediate state. Computational and structural biotechnology journal, 23, 4192.

Wang X, et al. (2024) WUREN: Whole-modal union representation for epitope prediction. Computational and structural biotechnology journal, 23, 2122.

Abanades B, et al. (2024) The Patent and Literature Antibody Database (PLAbDab): an evolving reference set of functionally diverse, literature-annotated antibody sequences and structures. Nucleic acids research, 52(D1), D545.

Zheng F, et al. (2024) Systematic investigation of machine learning on limited data: A study on predicting protein-protein binding strength. Computational and structural biotechnology journal, 23, 460.

Zhao N, et al. (2024) ABAG-docking benchmark: a non-redundant structure benchmark dataset for antibody-antigen computational docking. Briefings in bioinformatics, 25(2).

Chen H, et al. (2024) Accurate prediction of CDR-H3 loop structures of antibodies with deep learning. eLife, 12.

Rossmueller G, et al. (2024) Integrating In Silico and In Vitro Tools for Optimized Antibody Development-Design of Therapeutic Anti-oxMIF Antibodies. Antibodies (Basel, Switzerland),

13(4).

Yi L, et al. (2024) Single-cell 5' RNA sequencing of camelid peripheral B cells provides insights into cellular basis of heavy-chain antibody production. *Computational and structural biotechnology journal*, 23, 1705.

Liu H, et al. (2024) PPB-Affinity: Protein-Protein Binding Affinity dataset for AI-based protein drug discovery. *Scientific data*, 11(1), 1316.

Rajagopal N, et al. (2024) Deep learning-based design and experimental validation of a medicine-like human antibody library. *Briefings in bioinformatics*, 26(1).

Richardson E, et al. (2023) Characterisation of the immune repertoire of a humanised transgenic mouse through immunophenotyping and high-throughput sequencing. *eLife*, 12.

Myung Y, et al. (2023) Understanding the complementarity and plasticity of antibody-antigen interfaces. *Bioinformatics (Oxford, England)*, 39(7).

Fischman S, et al. (2023) "Redirecting an anti-IL-1 β antibody to bind a new, unrelated and computationally predicted epitope on hIL-17A". *Communications biology*, 6(1), 997.

Yuan Y, et al. (2023) DG-Affinity: predicting antigen-antibody affinity with language models from sequences. *BMC bioinformatics*, 24(1), 430.

Tam C, et al. (2023) Targeting Ras-binding domain of ELMO1 by computational nanobody design. *Communications biology*, 6(1), 284.

Saito A, et al. (2022) Virological characteristics of the SARS-CoV-2 Omicron BA.2.75 variant. *Cell host & microbe*, 30(11), 1540.

Aguilar Rangel M, et al. (2022) Fragment-based computational design of antibodies targeting structured epitopes. *Science advances*, 8(45), eabp9540.

Irudayanathan FJ, et al. (2022) Deciphering deamidation and isomerization in therapeutic proteins: Effect of neighboring residue. *mAbs*, 14(1), 2143006.

Scheid JF, et al. (2021) B cell genomics behind cross-neutralization of SARS-CoV-2 variants and SARS-CoV. *Cell*, 184(12), 3205.