

- Let's get a better feel for the structure of biological macromolecules and protein-ligand interactions by using an online visualization tool!
- Browse to the Protein Data Bank (PDB) at <https://www.rcsb.org>. The PDB is a public repository of experimentally determined biological macromolecular structures.

The screenshot shows the RCSB PDB website homepage. The top navigation bar includes links for Deposit, Search, Visualize, Analyze, Download, Learn, and More, along with a MyPDB button. The main header features the RCSB PDB logo, the text "159230 Biological Macromolecular Structures Enabling Breakthroughs in Research and Education", and a search bar with the placeholder text "Search by PDB ID, author, macromolecule, sequence, or ligands". Below the search bar are links for "Advanced Search" and "Browse by Annotations". The left sidebar contains a "Welcome" message and a list of navigation options: Deposit, Search, Visualize, Analyze, Download, and Learn. The main content area is divided into three sections: "A Structural View of Biology" which describes the PDB's role in providing 3D structures of proteins and nucleic acids; "Celebrating 20 YEARS OF Molecule of the Month" with a colorful molecular structure image; and "January Molecule of the Month" featuring a large, detailed 3D model of a protein complex and the text "Twenty Years of Molecules".

- Search for 1MBN and press “Go”. This opens the entry entitled “The stereochemistry of the protein myoglobin”. Myoglobin was the first protein structure ever solved.
- The page provides a lot of information about the structure, including when it was deposited into the database, how the structure was determined, and what small molecules are present in the structure. It will often provide a citation to a scientific article with more detail.

RCSB PDB Deposit Search Visualize Analyze Download Learn More MyPDB

159230 Biological Macromolecular Structures Enabling Breakthroughs in Research and Education

Search by PDB ID, author, macromolecule, sequence, or ligands Go

Advanced Search | Browse by Annotations

PDB-101 WORLDWIDE PDB EMDataResource NOVELLE ACID DATABASE Worldwide Protein Data Bank Foundation

Structure Summary 3D View Annotations Sequence Sequence Similarity Structure Similarity Experiment

Display Files Download Files

1MBN

The stereochemistry of the protein myoglobin

DOI: [10.2210/pdb1MBN/pdb](https://doi.org/10.2210/pdb1MBN/pdb)

Classification: [OXYGEN STORAGE](#)

Organism(s): [Physeter macrocephalus](#)

Deposited: 1973-04-05 Released: 1976-05-19

Deposition Author(s): [Watson, H.C.](#), [Kendrew, J.C.](#)

Experimental Data Snapshot

Method: X-RAY DIFFRACTION

Resolution: 2 Å

wwPDB Validation 3D Report Full Report

Metric	Percentile Ranks	Value
Clashscore		54
Ramachandran outliers		3.3%
Sidechain outliers		15.2%

Worse Better

■ Percentile relative to all X-ray structures
□ Percentile relative to X-ray structures of similar resolution

3D View: [Structure](#) | [Ligand Interaction](#)