

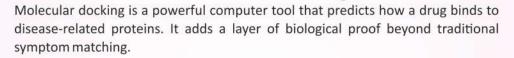
AYUSH Campus, Naringana, Mangaluru-575018

A CONSTITUENT COLLEGE OF YENEPOYA (DEEMED TO BE UNIVERSITY)

Research Consultancy on MOLECULAR DOCKING FOR HOMEOPATHIC DRUGS

## Tagline:

"Bridging Tradition and Molecular Science"



# Why Use Molecular Docking?

- Confirms if a remedy can act on a disease target
- · Reveals how and where the remedy binds inside the protein
- · Provides modern scientific evidence for the drug's effect
- Helps discover stronger, more effective drugs with less trial-and-error.

## **Getting Started!**

To begin, kindly review the literature to identify the lead and target molecules, and provide us with:

• Lead Molecule is the compound available in the drug. For example, the compound Atropine is found in the drug Belladona. You may search for the three dimensional structure of these lead molecules in databases like:

**PubChem:** https://pubchem.ncbi.nlm.nih.gov/ **ChEMBL:** https://www.ebi.ac.uk/chembl/ **DrugBank:** https://go.drugbank.com/

Provide the three dimensional structures of the lead molecules in **SMILES or SDF** file format. See overleaf for further instruction to search and download the lead molecule.

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#### **Services Offered**

- Computer-based docking with AutoDock Vina platform.
- Binding affinity predictions.
- Pose analysis and visualization.
- Interaction mapping between lead and target molecule

#### **Your Comprehensive Report Includes:**

- Docking results with optimal poses and binding energy.
- High-quality interaction maps & visualization images.
- A clear, step-by-step methodology

#### Fee and Timeline

- ₹600 + 18% GST per docking analysis
- Results within 4 working days (Mon–Fri) per docking.

Please contact us before payment



Payment link

https://rzp.io/rzp/shhU8bo

## Ready to start your research?

Contact us:

Coordinator.

Research & Development Cell, Yenepoya Homoeopathic Medical College,

AYUSH Campus, Naringana, Mangalore 575018

Email us: yhmcdocking@yenepoya.edu.in

Due to the computational nature of the work, fees are non-refundable once the process has begun

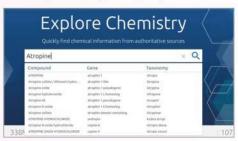
# PROCEDURE TO DOWNLOAD LEAD MOLECULE AND TARGET PROTEIN

#### Lead Molecule

- Identify the compound of interest through a thorough literature review.
- Visit PubChem https://pubchem.ncbi.nlm.nih.gov/.



Use the search bar to find your compound (e.g., Atropine).



 Select the correct molecule from the search results.



Scroll down to the 3D Conformer section, click Download, and save the structure in SDF format.



#### Target molecule

- Identify the biological target (protein/receptor/enzyme) through a thorough literature review.
- Visit the Protein Data Bank (PDB) https://www.rcsb.org/.



Use the search bar to find your protein target (e.g., Human muscarinic receptor M4).

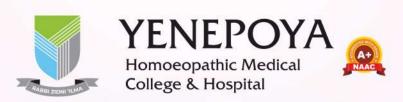


 Choose the correct protein entry and check key details (resolution, ligands, mutations, etc.).



 Click Download Files (top right) → choose Legacy PDB Format.





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