# Q. What is AADS?

AADS is an Automated Active site detection, Docking, and Scoring protocol for proteins with known 3D structure.

## **Q. How to site AADS?**

Singh T, Biswas D,and Jayaram B. (2011) AADS-an automated active site identification, docking, and scoring protocol for protein targets based on physicochemical descriptors. J Chem Inf Model. 24;51(10):2515-27. doi: 10.1021/ci200193z.

### Q. Does it also take the 2D structure of the protein as input?

No, AADS accept only 3D structure of protein in PDB format.

#### Q. What is the accepted format of input ligand in AADS?

AADS accept only hydrogen added ligand in PDB format.

#### Q. How are active sites sorted in AADS?

AADS sort active sites based on number of hydrogen-bond donor and acceptors, hydrophobic groups of the functional groups lining the active site and the volume of the cavity.

#### Q. Can I skip active site prediction and go straight to docking?

No, users can do docking only after active site prediction by AADS. Only docking is not allowed.

#### Q. How much time does AADS take to run a job?

AADS predicts active site in 3-4 seconds and performs docking with top-ten cavities in about 30 minutes.

#### Q. What is formal charge?

The formal charge is the difference in the number of valence electrons in the atom and the number of valence electrons in the Lewis structure.

#### Q. How can I resolve "error in input file"?

Please correct the format of input file according to the manual.