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Amicyanin is a type 1 copper protein mediating electron transfer between methylamine dehydrogenase (MADH) and cytochrome c-551i for energy production. [1] We present in here what kind of residues in amicyanin affect to the size of room for active site belonging copper of amicyanin. The method that we applied is the measurement and calculation of angles and distance among 4 lignads for copper; His 53, Cys 92, His 95 and Met 98 in all published mutant amicyanins mathematically. [2] The results demonstrated 3 things that volume of active site is larger in reduced form of amicyanin than in oxidized form, His 95 play a major role in deciding room size, and the residues on a turn and loop not ligands of copper influence distance change between His 95 and copper resulting in volume change of active site.

Keywords : Amicyanin , Active stie geometry, Active site volume

References

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