

The Evolution of Enzyme Mechanisms and Functional Diversity

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Keywords: *Enzyme activity, functional diversity*

Abstract

Enzyme activity is essential for almost all aspects of life. With completely sequenced genomes, the full complement of enzymes in an organism can be defined, and 3D structures have been determined for many enzyme families. Traditionally each enzyme has been studied individually, but as more enzymes are characterised it is now timely to revisit the molecular basis of catalysis, by comparing different enzymes and their mechanisms, and to consider how complex pathways and networks may have evolved. New approaches to understanding enzymes mechanisms and how enzyme families evolve functional diversity will be described.

References

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