

## Scientists provided detailed structure of snake anti-venom protein MP-4

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Scientists from Regional Centre for Biotechnology (RCB), Faridabad, International Centre for Genetic Engineering and Biotechnology (ICGEB), New Delhi and the Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar, Odisha determined the structure of MP-4 protein at a higher resolution (2.22 Å). As per earlier reports, the MP-4 protein provides protection against snake venom through an indirect antibody-based mechanism.

The structure of the MP-4 protein was previously determined at a resolution of 2.8 Å. Earlier there was no information available about the gene-sequence information of the protein; therefore, the side-chain assignment was made on basis of a partial sequence worked by methods like Edman degradation, sequence homology to orthologs and electron density.

The structure of MP-4 has now been determined at much higher resolution, and the structural related information published earlier has been validates as per new outcomes in the present study. Moreover, the present data gave more information about the side chains of the protein, thus, enabling further analysis of MP-4 structure. The study strengthens the earlier concept that conservative interpretations of relatively low-resolution structures remain correct even with the availability of high-resolution data.