

Structural and Functional Studies of *E.coli* Guanine Deaminase
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E. coli guanine deaminase (EcGuaD) catalyzes the conversion of guanine to xanthine. EcGuaD is a member of the aminohydrolase superfamily. Here, we have determined the X-ray crystal structure of EcGuaD. We hope to use information from the structure to modify the enzyme to deaminate other nucleobases. Site directed mutants were generated and biochemically characterized for enzymatic activity.