

Download Steps In The Mechanism Of Chymotrypsin Catalysis

Chymotrypsin cleaves peptide bonds by attacking the unreactive carbonyl group with a powerful nucleophile, the serine 195 residue located in the active site of the enzyme, which briefly becomes covalently bonded to the substrate, forming an enzyme-substrate intermediate. Enzyme catalysis is the increase in the rate of a chemical reaction by the active site of a protein. The protein catalyst may be part of a multi-subunit complex, and/or may transiently or permanently associate with a Cofactor (e.g. adenosine triphosphate). This insight lies at the heart of our current understanding of enzymatic catalysis. The latter part of the twentieth century has seen intensive research on the enzymes catalyzing the reactions of cell metabolism. This review intended to give a brief idea of the importance of proteases applications. Processes that involve protein hydrolysis steps find wide ranging utilizations, such as cleaning process, proteomic studies, or food biotechnology process.