

Structural and functional characteristics and properties of metzincins

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Abstract

In this review the main families of endopeptidases belonging to the clan of metzincins of zinc-dependent metal-loproteinas in organisms of wide evolutionary range from bacteria to mammals are considered. The data on classification, physicochemical properties, substrate specificity, and structural features of this group of enzymes are given. The activation mechanisms of metzincins, the role of these proteins in organisms, and their participation in various physiological processes are discussed. © 2012 Pleiades Publishing, Ltd.

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Keywords

adamalysins/reprolysins, astacins, matrixins, metalloproteinases, metzincins, serralysins