

1. Record Nr.	UNINA9910462131003321
Titolo	Handbook of proteolytic enzymes [[electronic resource]] . Volume 1 // edited by, Neil D. Rawlings, Guy Salvesen
Pubbl/distr/stampa	Oxford, : Academic, 2012
ISBN	1-283-73425-7 0-12-382220-3
Edizione	[3rd ed.]
Descrizione fisica	1 online resource (3987 p.)
Altri autori (Persone)	RawlingsNeil D SalvesenG
Disciplina	572.76
Soggetti	Proteolytic enzymes Cellular control mechanisms Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Previous ed.: London: Elsevier Academic, 2004.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; Handbook of Proteolytic Enzymes; Copyright Page; Contents; Editor Biographies; Contributors; Preface; Introduction; Terminology; Organization of the Handbook; Special forms of information in the Handbook; Links to the MEROPS database; Molecular images; Alignments; Secondary structure; Description of substrate specificity; References; Aspartic Peptidases; 1 Introduction: Aspartic and Glutamic Peptidases and Their Clans; Clan AA; Family A1; Other Families in Clan AA; Clan AF; Clan AC; Clan AD; Clan AE; Other Families; Glutamic Peptidases; Asparagine Peptide Lyases Clans NA, NC and NEInteins; Autotransporters; References; 2 Catalytic Pathways of Aspartic Peptidases; Introduction; Enzymatic Mechanism of Aspartic Peptidases; Enzymatic Mechanism of Glutamic Peptidases; References; 3 Pepsin A; Databanks; Name and History; Activity and Specificity; Structural Chemistry; Pepsinogen; Preparation; Biological Aspects; Related Peptidases; Further Reading; References; 4 Pepsin B; Databanks; Name and History; Activity and Specificity; Structural Chemistry; Preparation; Biological Aspects; Further Reading; References; 5 Chymosin; Databanks; Name and History Activity and SpecificityStructural Chemistry; Preparation; Biological

Aspects; Distinguishing Features; Related Proteinases; Further Reading; References; 6 Cathepsin E; Databanks; Name and History; Activity and Specificity; Structural Chemistry; Preparation; Biological Aspects; Tissue Distribution and Subcellular Localization; Regulation of Gene Expression; Processing, Maturation and Intracellular Trafficking Of Cathepsin E; Physiological Roles of Cathepsin E; Distinguishing Features; Further Reading; References; 7 Gastricsin; Databanks; Name and History; Activity and Specificity Structural Chemistry; Progastricsin; Preparation; Biological Aspects; References; 8 Cathepsin D; Databanks; Name and History; Activity and Specificity; Assay Methods; Specificity; Inhibition and Activation; Structural Chemistry; Three-dimensional Structure; Preparation; Biological Aspects; Gene and Expression Control; Knock-out Model; Organ Distribution and Cellular Localization; Apoptosis; Involvement in Cancer; Neurodegeneration; Other Biological Functions; Distinguishing Features; Related Peptidases; Acknowledgment; Further Reading; References; 9 Nothepsin; Databanks; Name and History Activity and Specificity Structural Chemistry; Primary Structure Analysis; Distinguishing Features of This New Class of Aspartic Proteinases; Retrieval and Sequencing of Nothepsin Enzymes; Presence of a Nothepsin Enzyme in Non-Antarctic Fish; Nothepsin in Organisms Other Than Fish; Preparation; Biological Aspects; Expression Pattern of the Nothepsin in Fish and Lizard; Phylogenetic Analysis, Adaptive Evolution and Role of Nothepsin; Further Reading; References; 10 Napsin A; Databanks; Name and History; Activity and Specificity; Structural Chemistry; Preparation; Biological Aspects Further Reading

Sommario/riassunto

The third edition of the Handbook of Proteolytic Enzymes is a comprehensive reference work for the enzymes that cleave proteins and peptides, written by acknowledged experts in the field and containing over 850 chapters. Each chapter is organized into sections describing the name and history, activity and specificity, structural chemistry, preparation, biological aspects, and distinguishing features for a specific peptidase. There are also introductory chapters on peptidase classification and mechanisms and a comprehensive index. For the first time, the Handbook is also
