

1. Record Nr.	UNINA9910830200703321
Autore	Mayer R. John
Titolo	Protein Degradation [[electronic resource]] : Cell Biology of the Ubiquitin-Proteasome System
Pubbl/distr/stampa	Hoboken, : Wiley, 2008
ISBN	1-282-37219-X 9786612372193 3-527-62022-2 3-527-62029-X
Descrizione fisica	1 online resource (254 p.)
Collana	Protein Degradation ; ; v.7
Altri autori (Persone)	CiechanoverAaron J RechsteinerMartin
Disciplina	572.76 612.3/98
Soggetti	Cell Physiology Proteins - Metabolism Proteins - metabolism Proteins --Metabolism Ubiquitin Ubiquitin - physiology Animal Biochemistry Human Anatomy & Physiology Health & Biological Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Protein Degradation; Contents; Preface; List of Contributors; 1 Ubiquitin: A New Player in the Peroxisome Field; 1.1 Introduction; 1.2 Matrix Protein Import into Peroxisomes is Mediated by Cycling Receptors; 1.3 Pex5p is Monoubiquitinated in Wild-type Cells, but Polyubiquitinated in Late-acting pex Mutants; 1.4 Ubiquitination of Pex18p; 1.5 Role for the RING Finger and AAA Peroxins in Pex5p Ubiquitination and Recycling; 1.6 Pex5p Monoubiquitination: A Role in Receptor Recycling; 1.7 Conclusions/Future Prospects; Acknowledgements; References

2 The Ubiquitin Proteasome System and Muscle Development2.1 Introduction; 2.2 Muscle Histology; 2.3 UPS and Developing Muscle; 2.3.1 Ubiquitin-dependent Degradation of MyoD; 2.3.2 Degradation of MyoD by SCF(MAFbx); 2.3.3 Other Muscle Regulatory Factors; 2.4 UPS and Organizing Muscle; 2.4.1 Ozz-E3-dependent -Catenin Regulation in the Muscle; 2.4.2 Regulation of Myosin Assembly by CHN-1 and UFD-2; 2.5 UPS and Muscle Destruction or Degeneration; 2.5.1 N-end Rule and Muscle Atrophy; 2.5.2 MuRFs, E3 Enzymes in Atrophying Muscles; 2.5.3 Atrogin-1/MAFbx Function in Muscle Atrophy 2.5.4 Activation of Muscle-atrophy Pathways2.6 Concluding Remarks; References; 3 The COP9 Signalosome: Structural and Biochemical Conservation and Its Roles in the Regulation of Plant Development; 3.1 Introduction; 3.2 The Plant COP9 Signalosome; 3.3 CSN Involvement in the Ubiquitin-Proteasome Pathway; 3.4 Plant CSN Biochemical Activities; 3.4.1 Deneddylation; 3.4.2 Subcellular Partitioning; 3.5 CSN Functions in Plant Development; 3.5.1 Floral Development; 3.5.2 Responses to Plant Hormones; 3.5.3 Disease Resistance; 3.5.4 Photomorphogenesis; 3.6 Conclusions; References 4 Ubiquitin and Protein Sorting to the Lysosome4.1 Introduction; 4.2 Identification of Ubiquitin as an Endosomal Sorting Signal; 4.3 Ubiquitin-mediated Sorting at the Endosome: The MVB Sorting Machinery; 4.3.1 Endosome-associated Ubiquitin Interacting Domains: Structure and Function; 4.3.2 The Hrs-STAM Complex and the Endosomal Clathrin Coat; 4.3.3 GGA and Tom1: Alternative Sorting Adapters?; 4.3.4 The ESCRT Machinery; 4.3.5 Vps4-SKD1; 4.4 Ubiquitin Ligases and Endosomal Sorting; 4.4.1 Nedd4 Family; 4.4.2 c-Cbl; 4.5 Endosomal DUBs; 4.5.1 Ubp1 and Ubp2; 4.5.2 Doa4; 4.5.3 UBPY; 4.5.4 AMSH 4.6 Polyubiquitin Linkages and Endocytosis4.6.1 Proteasome Involvement in Endocytic Sorting; 4.6.2 K63-linked Ubiquitin; 4.7 Future Directions; Acknowledgements; References; 5 ISG15-dependent Regulation; 5.1 Introduction and Overview; 5.2 The Discovery of ISG15; 5.3 Structure and Properties of the ISG15 Protein; 5.4 The ISG15 Conjugation Pathway; 5.4.1 Activation of ISG15 by UbE1L; 5.4.2 UbcH8 is an ISG15-specific Conjugating Enzyme; 5.4.3 Candidate ISG15-specific Ligases; 5.5 Regulation of Intracellular ISG15 Pools; 5.6 Functional Roles for ISG15; 5.6.1 ISG15 as an Extracellular Cytokine 5.6.2 Role of ISG15 in the Antiviral Response

Sommario/riassunto

The third of four volumes discusses the role of ubiquitin-mediated protein breakdown in cellular regulation and physiology. Required reading for molecular biologists, cell biologists and physiologists with an interest in the topic.
