1. Record Nr. UNINA9910635392803321

Titolo	The Networking of Chaperones by Co-Chaperones / / edited by Adrienne L. Edkins, Gregory L. Blatch
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-14740-5
Edizione	[3rd ed. 2023.]
Descrizione fisica	1 online resource (436 pages)
Collana	Subcellular Biochemistry, , 2542-8810 ; ; 101
Disciplina	780.71
Soggetti	Protein folding Proteins Post-translational modification Cytology Biomolecules Physical biochemistry Macromolecules Protein Folding Protein Biochemistry Post-translational Modifications Cell Biology Structural Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chapter 1: GrpE, Hsp110/Grp170, HspBP1/Sil1 and BAG domain proteins: Nucleotide exchange factors for Hsp70 molecular chaperones -- Chapter 2: Functions of the Hsp90-Binding FKBP Immunophilins -- Chapter 3: Hsp70/Hsp90 organising protein (Hop): coordinating much more than chaperones -- Chapter 4: Specification of Hsp70 function by Hsp40 Co-Chaperones -- Chapter 5: Cdc37 as a Co-chaperone to Hsp90 -- Chapter 6: p23 and Aha1 – Distinct functions promote client maturation -- Chapter 7: Beyond chaperoning: UCS proteins emerge as regulators of myosin-mediated cellular processes -- Chapter 8: Chaperonin - Co-Chaperonin Interactions -- Chapter 9: Co-

chaperones of the human endoplasmic reticulum: an update -- Chapter 10: J Domain Proteins Orchestrate the Multifunctionality of Hsp70s in Mitochondria: Insights from Mechanistic and Evolutionary Analyses -- Chapter 11: Impact of co-chaperones and post-translational modifications towards Hsp90 drug sensitivity -- Chapter 12: CHIP: a co-chaperone for degradation by the proteasome and lysosome -- Chapter 13: HSP70-HSP90 chaperone networking in protein misfolding disease.

Sommario/riassunto

Co-chaperones are important mediators of the outcome of chaperone assisted protein homeostasis, which is the dynamic integration of the processes of protein folding, degradation and translocation to ensure that cellular function is finely tuned in space and time. This third edition of the book The Networking of Chaperones by Co-chaperones describes how the function of the major molecular chaperones is regulated by co-chaperones, a diverse cohort of non-client proteins. Since the second edition was released, not only has knowledge deepened on how co-chaperones act as nodes to network and functionalise chaperones, but an understanding of their broader biological function has started to emerge. The third edition provides new and updated chapters highlighting recent developments and emerging themes on co-chaperones, such as their extracellular functions, their role in human disease and their status as putative drug targets. The book is a useful resourcefor both newcomers and established researchers in the field of cell stress and chaperones, as well as those interested in cross-cutting disciplines such as cellular networks and systems biology. .