

1. Record Nr.	UNINA9910737300003321
Titolo	Cellular Biology of the Endoplasmic Reticulum / / edited by Luis B. Agellon, Marek Michalak
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-67696-X
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (329 pages)
Collana	Progress in Molecular and Subcellular Biology, , 2197-8484 ; ; 59
Disciplina	571.65
Soggetti	Cytology Cancer Immunology Neurology Cell Biology Cancer Biology Reticle endoplasmàtic Citologia Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	A View of the Endoplasmic Reticulum Through the Calreticulin Lens -- Structural Analysis of Calreticulin, an Endoplasmic Reticulum-Resident Molecular Chaperone -- The Role of Endoplasmic Reticulum Chaperones in Protein Folding and Quality Control -- Proteins Interacting with STIM1 and Store-Operated Ca ²⁺ Entry -- Endoplasmic Reticulum (ER) and ER-Phagy -- Defects in Protein Folding and/or Quality Control Cause Protein Aggregation in the Endoplasmic Reticulum -- Roles of Calreticulin in Protein Folding, Immunity, Calcium Signaling and Cell Transformation -- Impact of Calreticulin and Its Mutants on Endoplasmic Reticulum Function in Health and Disease -- Cancer Biology of the Endoplasmic Reticulum Lectin Chaperones Calreticulin, Calnexin and PDIA3/ERp57 -- Maintenance of Endoplasmic Reticulum Protein Homeostasis in Cancer: Friend or Foe -- IP3 Receptor Biology and Endoplasmic Reticulum Calcium Dynamics in Cancer --

Disruption of Endoplasmic Reticulum Proteostasis in Age-Related Nervous System Disorders -- Endoplasmic Reticulum Homeostasis and Stress Responses in *Caenorhabditis elegans* -- Tardigrada: An Emerging Animal Model to Study the Endoplasmic Reticulum Stress Response to Environmental Extremes. .

Sommario/riassunto

This book provides a comprehensive overview of the biology of the endoplasmic reticulum (ER) and the associated ER proteins, it discusses their structure, function and signaling mechanisms in the cell and their role in disease. This book also offers insights into the practical aspects of research and demonstrates the use of non-mammalian models to study the structure and function of the ER. Written by leading experts in the field, the book enables readers to gain a thorough understanding of current ER biology. It is intended for scientists and clinical researchers working on the endoplasmic reticulum in all its various roles and facets in health and disease. .