

1. Record Nr.	UNINA9910253941903321
Titolo	Pharmacology of Mitochondria // edited by Harpreet Singh, Shey-Shing Sheu
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-57313-6
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (491 pages) : illustrations
Collana	Handbook of Experimental Pharmacology, , 0171-2004 ; ; 240
Disciplina	571.657
Soggetti	Pharmacology Cardiology Neurosciences Pharmacology/Toxicology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Mitochondrial Genetics and Ion Transportation: Nuclear transcription factors in the mitochondria: a new paradigm in cellular transformation -- The mitochondrial permeability transition pore and ATP synthase -- Mitochondrial ion fluxes in health and diseases -- Mitochondrial anion channels -- Pharmacology of mitochondrial potassium channels -- Mitochondrial Ca ²⁺ uniporter complex as promising therapeutic target for human diseases and aging -- Mitochondria in Health and Diseases: Mitochondrial Division in Human Disease -- Mitochondrial cholesterol and the paradox in cell death -- Mitochondrial dysfunction in neuromuscular disorders -- Mitochondrial dynamics in cancer -- The emerging role of mitochondrial targeting in kidney disease -- Mitochondrial dynamics as therapeutic targets for treating cardiac disease -- Mitochondria in Alzheimer's disease and Diabetes-associated Neurodegeneration -- Leber Hereditary Optic Neuropathy, a mitochondrial disease unique in many ways -- Therapeutic Approaches and Mitochondria: Mitochondrial Variation in Health and Disease -- Bioinformatic methods and resources for integrated mitochondrial physiology -- Nanoparticle based therapeutics for mitochondrial dysfunctions -- Mitochondrial respiratory chain complexes as drugs

targets -- Targeting the Mitoflash for the Control of Mitochondrial Functions.-Mitochondrial Antioxidant Therapy: Promise or Delusion?- Roles of mitochondrial ROS generation to protect from further prooxidant situations -- MITO-Porter for mitochondrial delivery and mitochondrial functional analysis -- Toxicity of antiepileptic drugs to mitochondria.

Sommario/riassunto

This special book is conceived to highlight mitochondrial structural and functional integrity and how they are associated with several human diseases such as cardiovascular, cancer, renal, neurological disorder, and genetic disorders. The chapters contributed by leading mitochondrial researchers in the handbook will take us through the novel pharmacological strategies via mitochondria to understand their physiological and pathological role as well as present them as therapeutic targets.
