



cells



Special Issue Reprint

Mitochondria in Health and Diseases

www.mdpi.com/books/reprint/2792

Edited by

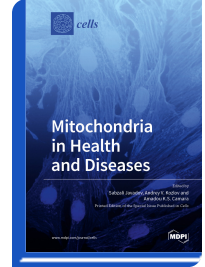
Sabzali Javadov

Andrey V. Kozlov

Amadou K.S. Camara

ISBN 978-3-03936-384-1 (Hardback)

ISBN 978-3-03936-385-8 (PDF)



Mitochondria are subcellular organelles evolved by the endosymbiosis of bacteria with eukaryotic cells. They are the main source of ATP in the cell and engaged in other aspects of cell metabolism and cell function, including the regulation of ion homeostasis, cell growth, redox status, and cell signaling. Due to their central role in cell life and death, mitochondria are also involved in the pathogenesis and progression of human diseases/conditions, including neurodegenerative and cardiovascular disorders, cancer, diabetes, inflammation, and aging. However, despite the increasing number of studies, precise mechanisms whereby mitochondria are involved in the regulation of basic physiological functions, as well as their role in the cell under pathophysiological conditions, remain unknown. A lack of in-depth knowledge of the regulatory mechanisms of mitochondrial metabolism and function, as well as interplay between the factors that transform the organelle from its role in pro-survival to pro-death, have hindered the development of new mitochondria-targeted pharmacological and conditional approaches for the treatment of human diseases. This book highlights the latest achievements in elucidating the role of mitochondria under physiological conditions, in various cell/animal models of human diseases, and in patients.



Order Your Print Copy

You can order print copies at

www.mdpi.com/books/reprint/2792

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.