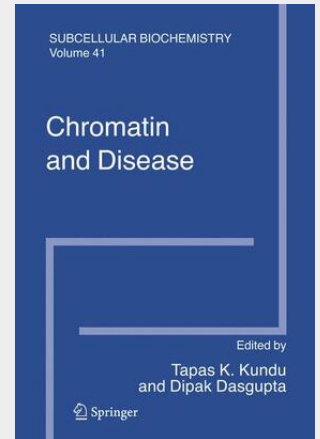


Chromatin and Disease

It is more evident now than ever before that dynamic organization of human genome into nucleoprotein structure, chromatin confers the unique regulatory mechanisms for most of the cellular phenomena, which include replication, transcription, DNA repair, recombination and also apoptosis. The dynamic nature of the chromatin is regulated by chromatin modifications (epigenetic alterations), remodeling, histone chaperones and functional interactions of different chromatin interacting n- histone proteins. Dysfunction of this highly inter connected machineries disturb the cellular homoeostasis, and thereby causes several diseases. As we advance in our knowledge of chromatin function and also disease mechanisms in more details, their causal relationship is becoming more evident. This has lead to the identification of chromatin function as target for new generation therapeutics. In the light of these advances, it happens to be the right time to explore current insights into various aspect of chromatin and disease connection under one cover. Authors who are actively involved in chromatin research and have made several original contributions to develop latest paradigms in the field have written the chapters of this book. Significantly, the authors' repertoire is truly international. They come from eight different countries of Asia, Europe and America. The book has been divided into three different parts. Part I introduces the reader to the dynamic nature of chromatin structure and its link to diseases. First two chapters in this part deal with the chromatin architecture, chromatin dynamics in the cell cycle and molecular mechanism of chromatin remodeling.

It is more evident now than ever before that dynamic organization of human genome into nucleoprotein structure, chromatin confers the unique regulatory mechanisms for most of the cellular phenomena, which include replication, transcription, DNA repair, recombination and also apoptosis. The dynamic nature of the chromatin is regulated by chromatin modifications (epigenetic alterations), remodeling, histone chaperones and functional interactions of different chromatin interacting n- histone proteins. Dysfunction of this highly inter connected machineries disturb the cellular homoeostasis, and thereby causes several diseases. As we advance in our knowledge of chromatin function and also disease mechanisms in more details, their causal relationship is becoming more evident. This has lead to the identification of chromatin function as target for new generation therapeutics. In the light of these advances, it happens to be the right time to explore current insights into various aspect of chromatin and disease connection under one cover. Authors who are actively involved in chromatin research and have made several original contributions to develop latest paradigms in the field have written the chapters of this book. Significantly, the authors' repertoire is truly international. They come from eight different countries of Asia, Europe and America. The book has been divided into three different parts. Part I introduces the reader to the dynamic nature of chromatin structure and its link to diseases. First two chapters in this part deal with the chromatin architecture, chromatin dynamics in the cell cycle and molecular mechanism of chromatin remodeling.



213,99 €

199,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9789048173747

Medium: Buch

ISBN: 978-90-481-7374-7

Verlag: Springer Netherlands

Erscheinungstermin: 11.11.2010

Sprache(n): Englisch

Auflage: 1. Auflage. Softcover version of original hardcover Auflage 2007

Serie: Subcellular Biochemistry

Produktform: Kartoniert

Gewicht: 709 g

Seiten: 458

Format (B x H): 155 x 235 mm

