1. Record Nr. UNINA9910298337703321

Titolo Non-coding RNAs and Cancer [[electronic resource] /] / edited by

Muller Fabbri

Pubbl/distr/stampa New York, NY:,: Springer New York:,: Imprint: Springer,, 2014

ISBN 1-4614-8444-8

Edizione [1st ed. 2014.]

Descrizione fisica 1 online resource (287 p.)

Disciplina 571.6

572 572.6 599935

Soggetti Cancer research

Cell biology Biochemistry

Posttranslational modification

Gene expression Human genetics Cancer Research Cell Biology

Biochemistry, general

Posttranslational Modification

Gene Expression Human Genetics

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Description based upon print version of record.

Nota di bibliografia Includes bibliographical references and index.

Nota di contenuto Introduction -- Biogenesis and Physiology of microRNAs.-Detecting

non-coding RNA expression: from arrays to next generation

sequencing -- MicroRNAs in Solid Tumors.-MicroRNAs in hematologic malignancies -- miRNAs as Cancer Biomarkers -- Unraveling the complex network of interactions between non-coding RNAs and epigenetics in cancer -- MicroRNA SNPs in Cancer -- Bioinformatics Approaches to the study of microRNAs -- Beyond miRNAs: role of other

non-coding RNAs in cancer -- Translational Implications for non-

coding RNA in Cancer -- Index.

Sommario/riassunto

The discovery of microRNAs and its role as gene expression regulators in human carcinogenesis represents one of the most important scientific achievements of the last decade. More recently, other non-coding RNAs have been discovered and its implications in cancer are emerging as well, suggesting a broader than anticipated involvement of the non-coding genome in cancer. Moreover, completely new and unexpected functions for microRNAs are being revealed, leading to the identification of new anticancer molecular targets. This book represents a comprehensive guide on non-coding RNAs and cancer, spanning from its role as cancer biomarkers, to providing the most useful bioinformatic tools, to presenting some of the most relevant discoveries, which indicates how these fascinating molecules act as fine orchestrators of cancer biology.