1. Record Nr. UNINA9910461617703321

Titolo	MicroRNAs in development and cancer [[electronic resource] /] / editor, Frank J. Slack
Pubbl/distr/stampa	London, : Imperial College Press, 2011
ISBN	1-283-14332-1 9786613143327 1-84816-367-3
Descrizione fisica	1 online resource (300 p.)
Collana	Molecular medicine and medicinal chemistry ; ; v. 1
Altri autori (Persone)	SlackFrank J
Disciplina	572.88
Soggetti	Cancer - Genetic aspects Small interfering RNA Electronic books.
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	Contents; Preface; 1 Introduction to Gene Regulation by Small RNAs Allison L. Abbott; 2 The Emerging Non-Coding RNA World Ahmad M. Khalil, Maite Huarte and John L. Rinn; 3 MicroRNAs in C. elegans Development Helge Großhans and Almuth E. Mullner; 4 MicroRNAs in Mammalian Development Andrea Ventura; 5 MicroRNAs in Hematopoietic Development Silvia Monticelli; 6 MicroRNAs Function as Tumor Suppressor Genes and Oncogenes Aurora Esquela-Kerscher; 7 Simultaneous Detection of Primary, Precursor and Mature MicroRNAs by qPCR Jinmai Jiang, Eun Joo Lee and Thomas D. Schmittgen 8 Single Nucleotide Polymorphisms in MicroRNAs and MicroRNA Binding Sites with Roles in Cancer Lena J. Chin and Frank J. Slack9 MicroRNAs as Potential Diagnostics and Therapeutics Trupti Paranjape, Jae Choi and Joanne B.Weidhaas; 10 MicroRNA Target Prediction Isidore Rigoutsos and Aristotelis Tsirigos; 11 Non-Coding RNAs in Cancer - The Other Part of the Story Muller Fabbri and George A. Calin; Index
Sommario/riassunto	MicroRNAs have recently emerged as key regulators of gene expression during development and are frequently misexpressed in human disease states, in particular cancer. These 22-nucleotide-long transcripts act to promote or repress cell proliferation, migration and apoptosis during

development, all of which are processes that go awry in cancer. Thus, microRNAs have the ability to behave like oncogenes or tumor suppressors. In addition, their small size and molecular properties make them amenable as targets and therapeutics in cancer treatment. This book goes into detail on how microRNAs represen