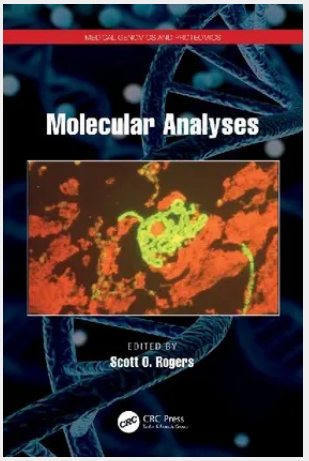
Rogers

Molecular Analyses

DNA and RNA extraction methods from a variety of tissues and samples are now routine, including extraction from single cells. Many methods are now automated. Sequencing efficiency has reached the point where it is now possible to obtain gigabases of data, both quickly and inexpensively. Such methods permit the identification of gene versions, including those associated with disease (e.g. small nucleotide polymorphism analyses, or SNPs). The general public as well as clinicians can now access a wide variety of literature on the molecular bases of diseases, allowing them to better assess disease risks and treatments. This volume concentrates on medically-focused methods, and therefore the major audience will be medical professionals, students, and those involved in medically-related research endeavors. There are also papers in this volume dealing specifically with methods developed to analyze large sequence data sets. Many methods reviewed herein are more broadly applicable to other fields in biology, chemistry, bioinformatics, and bioengineering, and are intended for a broad readership. Key Features - Summarizes nucleic acid extractions from a wide variety of tissues and cells - Describes processes of nucleic acid preservation - Reviews forensic sampling, detection of nucleic acids, and delivery of nucleic acids to multicellular organisms - Provides essential guidance for sequencing, sequence analysis, database searches, and phylogenetic analyses - Includes additional methods useful for analysis of nucleic acids and proteins Related Titles DeSalle, et al. Phylogenomics: A Primer (ISBN 978-0-3670-2849-7). Jennings, W. B. Phylogenomic Data Acquisition: Principles and Practice (ISBN 978-0-3678-6980-9). Wang, X. Next-Generation Sequencing Data Analysis (ISBN 978-1-4822-1788-9) Sung, W.-K. Algorithms for Next-Generation Sequencing (ISBN 978-0-3676-5797-0)

Methods for extraction, manipulation, and characterization of nucleic acids, peptides, and proteins have been rapidly developed. Extraction from a variety of tissues and samples have become routine and automated. Next generation sequencing (NGS) methods have been developed. This book focuses on medically-focused methods.



235,10 €
235,10 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780367903718
Medium: Buch
ISBN: 978-0-367-90371-8
Verlag: CRC Press
Erscheinungstermin: 11.07.2022
Sprache(n): Englisch
Auflage: 1. Auflage 2022
Serie: Molecular Genomics and Proteomics
Produktform: Gebunden
Gewicht: 728 g
Seiten: 375
Format (B x H): 161 x 240 mm