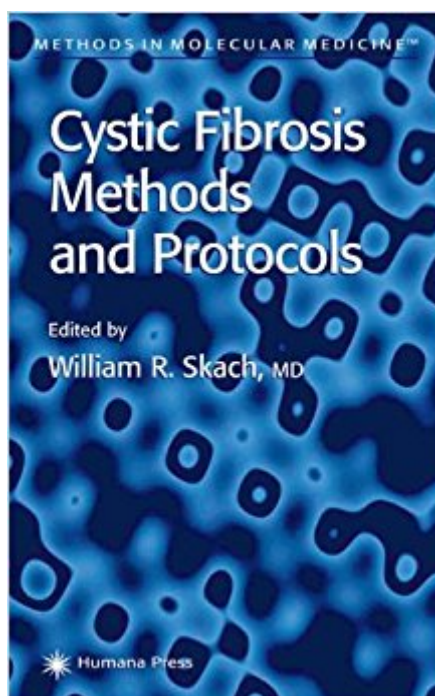




Ebook Directory
the best source of ebook

The book was found

Cystic Fibrosis Methods And Protocols (Methods In Molecular Medicine)



Synopsis

Since the cloning of the cystic fibrosis transmembrane conductance re- lator (CFTR) nearly a decade ago, cystic fibrosis (CF) research has witnessed a dramatic expansion into new scientific areas. Basic researchers, clinicians, and patients increasingly rely on fundamental techniques of genetics, molecular biology, electrophysiology, biochemistry, cell biology, microbiology, and immunology to understand the molecular basis of this complex disease. Research into the pathophysiology of CF has established numerous paradigms of ion channel dysfunction that extend from inflammation and infection in the airways of patients to basic mechanisms of protein processing and regulation in intracellular components. With these rapid advances has come an increasing need for research scientists to understand and utilize a growing array of basic laboratory tools. This volume of *Methods in Molecular Medicine, Cystic Fibrosis Methods and Protocols* satisfies that need by providing detailed protocols for the laboratory techniques used throughout CF research. From electrophysiology and cell biology, to animal models and gene therapy, the comprehensive set of methods covered here provide step-by-step instructions needed for investigators to incorporate new approaches into their research programs. Contributions have been chosen to reflect the rich diversity of techniques and to provide a cohesive framework for understanding challenges that are currently at the forefront of CF research. It is hoped that this volume will serve as a valuable reference that will not only foster interdisciplinary investigations into current problems encountered in CF, but also facilitate the translation of new scientific discoveries into clinical solutions.

Book Information

Series: *Methods in Molecular Medicine* (Book 70)

Hardcover: 615 pages

Publisher: Humana Press; 2002 edition (February 28, 2002)

Language: English

ISBN-10: 0896038971

ISBN-13: 978-0896038974

Product Dimensions: 6.1 x 1.4 x 9.2 inches

Shipping Weight: 2.6 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #4,327,371 in Books (See Top 100 in Books) #80 in *Books > Health,*

Fitness & Dieting > Children's Health > Cystic Fibrosis #672 in *Books > Textbooks > Medicine*

Customer Reviews

"The coverage of methodologies is extremely broad and will be useful for those wanting to find out more about some of the less routine techniques used in the analysis of the CFTR protein/chloride channel. The style of protocol-based chapters enables in manuscripts due to considerations of space or potential repetition of previously published techniques. As such many of the chapters are valuable." -Molecular Biotechnology "Undoubtedly this book will be regarded as essential reading for scientists in the field. It provides details of research methodology, which are rarely published in peer reviewed journals. It will also enable researchers to identify subtle differences in techniques in their own laboratories from those described in these chapters. As such, it will be a very important book for all those who conduct laboratory-based research into cystic fibrosis." -Journal of Paediatrics and Child Health

Since the cloning of the cystic fibrosis transmembrane conductance regulator (CFTR) nearly a decade ago, cystic fibrosis researchers, clinicians, and patients have come to rely increasingly on a diverse array of fundamental techniques to understand the molecular basis of this complex disease. Cystic Fibrosis Methods and Protocols consolidates a broad range of detailed and readily reproducible in vitro, cellular, and whole animal laboratory protocols into an indispensable resource. From electrophysiology and cell biology, to animal models and gene therapy, this comprehensive set of methods provides the step-by-step instructions needed for investigators to incorporate new approaches into their research programs. Specific protocols describe new techniques for diagnosis, in vitro methods for the expression and functional analysis of CFTR, novel biochemical and cellular systems to determine how mutations subvert CFTR function, and in vivo protocols to examine how CFTR dysfunction produces multisystem pathology in human and animal models. Comprehensive, multidisciplinary, and highly practical, Cystic Fibrosis Methods and Protocols makes accessible to today's cystic fibrosis investigator the powerful new scientific techniques required to investigate the basic science of the disease and to translate this into effective clinical solutions.

[Download to continue reading...](#)

Cystic Fibrosis: The Cystic Fibrosis Care & Relief Guide - An Essential Guide For Parents And Family & Friends Caring For Cystic Fibrosis Patients (Respiratory ... Genetic Disease, Chronic Disease Book 1) Cystic Fibrosis Methods and Protocols (Methods in Molecular Medicine) Cystic

Fibrosis: Diagnosis and Protocols, Volume I: Approaches to Study and Correct CFTR Defects (Methods in Molecular Biology) [Cystic Fibrosis: A Guide for Patient and Family [CYSTIC FIBROSIS: A GUIDE FOR PATIENT AND FAMILY BY Orenstein, David M. (Author) Aug-10-2011] By Orenstein, David M. (Author) [2011) [Paperback] Cystic Fibrosis Life Expectancy: 30, 50, 70 (Health, Fitness and Dieting: Children's Health: Cystic Fibrosis Book 1) Hemoglobin Disorders: Molecular Methods and Protocols (Methods in Molecular Medicine, Vol. 82) Bacteriophages: Methods and Protocols, Volume 2: Molecular and Applied Aspects (Methods in Molecular Biology) Cystic Fibrosis, An Issue of Clinics in Chest Medicine, 1e (The Clinics: Internal Medicine) Drugs of Abuse: Neurological Reviews and Protocols (Methods in Molecular Medicine) Mycobacterium Tuberculosis Protocols (Methods in Molecular Medicine) Novel Anticancer Drug Protocols (Methods in Molecular Medicine) Candida Albicans: Methods and Protocols (Methods in Molecular Biology) Candida Species: Methods and Protocols (Methods in Molecular Biology) Legionella: Methods and Protocols (Methods in Molecular Biology) Patch-Clamp Methods and Protocols (Methods in Molecular Biology) Liposome Methods and Protocols (Methods in Molecular Biology) Vaccine Technologies for Veterinary Viral Diseases: Methods and Protocols (Methods in Molecular Biology) Mouse Models of Allergic Disease: Methods and Protocols (Methods in Molecular Biology) The Troubled Dream of Genetic Medicine: Ethnicity and Innovation in Tay-Sachs, Cystic Fibrosis, and Sickle Cell Disease Cystic Fibrosis: A Trilogy of Biochemistry, Physiology, and Therapy (Subject Collection from Cold Spring Harbor Perspectives in Medicine)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)