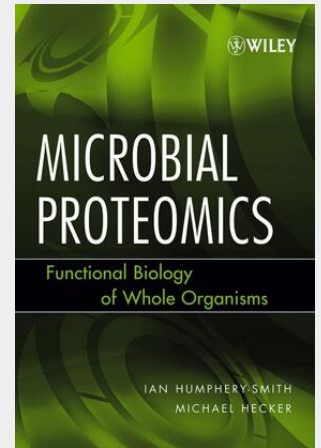


Microbial Proteomics

Functional Biology of Whole Organisms

Discover important lessons learned about whole organism biology via microbial proteomics This text provides an exhaustive analysis and presentation of current research in the field of microbial proteomics, with an emphasis on new developments and applications and future directions in research. The editors and authors show how and why the relative simplicity of microbes has made them attractive targets for extensive experimental manipulation in a quest for both improved disease prevention and treatment and an improved understanding of whole organism functional biology. In particular, the text demonstrates how microbial proteomic analyses can aid in drug discovery, including identification of new targets, novel diagnostic markers, and lead optimization. Each chapter is written by one or more leading experts in the field and carefully edited to ensure a consistent and thorough approach throughout. Methods, technologies, and tools associated with the most promising approaches are stressed. Key topics covered include: * Microbial pathogenesis at the proteome level * Whole cell modeling * Structural proteomics and computational analysis * Biomolecular interactions * Physiological proteomics * Metabolic reconstruction using proteomics data While presenting the practical utility of proteomics data, the text is also clear on the field's current limitations, pointing to areas where further investigation is needed. Offering a state-of-the-art perspective from internationally recognized experts, this text is ideally suited for researchers and students across the gamut of genomic sciences, including biochemistry, microbiology, molecular biology, genetics, biomedical and pharmaceutical sciences, biotechnology, and veterinary science.

Discover important lessons learned about whole organism biology via microbial proteomics This text provides an exhaustive analysis and presentation of current research in the field of microbial proteomics, with an emphasis on new developments and applications and future directions in research. The editors and authors show how and why the relative simplicity of microbes has made them attractive targets for extensive experimental manipulation in a quest for both improved disease prevention and treatment and an improved understanding of whole organism functional biology. In particular, the text demonstrates how microbial proteomic analyses can aid in drug discovery, including identification of new targets, novel diagnostic markers, and lead optimization. Each chapter is written by one or more leading experts in the field and carefully edited to ensure a consistent and thorough approach throughout. Methods, technologies, and tools associated with the most promising approaches are stressed. Key topics covered include: * Microbial pathogenesis at the proteome level * Whole cell modeling * Structural proteomics and computational analysis * Biomolecular interactions * Physiological proteomics * Metabolic reconstruction using proteomics data While presenting the practical utility of proteomics data, the text is also clear on the field's current limitations, pointing to areas where further investigation is needed. Offering a state-of-the-art perspective from internationally recognized experts, this text is ideally suited for researchers and students across the gamut of genomic sciences, including biochemistry, microbiology, molecular biology, genetics, biomedical and pharmaceutical sciences, biotechnology, and veterinary science.



241,50 €
225,70 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780471699750
Medium: Buch
ISBN: 978-0-471-69975-0
Verlag: Wiley
Erscheinungstermin: 01.08.2006
Sprache(n): Englisch
Auflage: 1. Auflage 2006
Serie: Methods of Biochemical Analysis
Produktform: Gebunden
Gewicht: 1075 g
Seiten: 530
Format (B x H): 191 x 267 mm

