

Proteins Membrane Binding And Pore Formation

[DOWNLOAD HERE](#)

1;Title Page;3 2;Copyright Page;4 3;PREFACE;5 4;ABOUT THE EDITORS...;7 5;ABOUT THE EDITORS...;8 6;PARTICIPANTS;9 7;Table of Contents;13 8;Chapter 1 Introduction;18 8.1;Introduction;18 8.2;Nomenclature;19 8.3;Three-Dimensional Structures of Pore-Forming Proteins;19 8.3.1;Pore-Forming Peptides;19 8.3.2;a-PFTs;20 8.3.3;B-PFTs;22 8.3.4;Bcl-2 Proteins;23 8.3.5;MACPF Superfamily;23 8.3.6;CLICs;23 8.4;Membrane Binding;24 8.5;Oligomerization;24 8.6;Common Features of Membrane Insertion;25 8.6.1;a-PFPs;25 8.6.2;B-PFTs;25 8.6.3;CLICs;26 8.7;Conclusion;26 8.8;References;27 9;Chapter 2 Energetics of Peptide and Protein Binding to Lipid Membranes;31 9.1;The Lipid Bilayer Phase;31 9.2;Hydrophobic Interactions;32 9.3;Electrostatic Interactions;34 9.4;Additivity between Electrostatic and Hydrophobic Interactions;35 9.5;The Influence of Peptide and Protein Structure;35 9.6;Specific Interactions;36 9.7;Specificity: The Formation of Ordered Pores;36 9.8;Promiscuity: Membrane-Permeabilization by Interfacial Activity;38 9.9;Conclusion;38 9.10;References;39 10;Chapter 3 Membrane Association and Pore Formation by Alpha-Helical Peptides;41 10.1;Introduction;41 10.2;Alamethicin and Other Peptaibols;41 10.3;Cationic Amphipathic Antimicrobial Peptides;43 10.4;Membrane Proteins;44 10.5;Conclusion;44 10.6;References;45 11;Chapter 4 Role of Membrane Lipids for the Activity of Pore Forming Peptides and Proteins;48 11.1;Introduction;48 11.2;Membrane Interfaces Are Ideal Binding Sites for Pore-Forming Peptides and Proteins;49 11.2.1;General Effects of Negatively Charged Lipids;51 11.2.2;Some Specific Roles of Lipids for Membrane Binding;53 11.3;A Membrane Foldase Activity Configures Peptide and Protein Active Structures;54 11.3.1;Structure Remodelling at the Membrane Interface;54 11.3.2;The Lipid Membrane Controls Inter-Protein Interactions;55 11.3.3;The Complex Membrane-Dependent Regulation of Bcl-2 Proteins;55 11.4;Role of Lipids in the Formation and Stabilization of Pores;56 11.4.1;The Latent Membrane Pores: Relatives of Pores Induced by Polypeptides?;56 11.4.2;A Consensus View of Pore Formation Stressing the Role of Lipids;58 11.5;Physical Properties of Polypeptide-Induced Pores Related to the Role of Lipids;61 11.5.1;Surface Tension, Line Tension and the Stability of Membrane Pores;61 11.5.2;Lipid-Driven Cooperativity: A Many-Body Effect Triggering Pore Formation;61 11.5.3;The Elusive Role of Spontaneous

Curvature: Classical and Nonclassical Effects;63 11.6;Conclusion;64 11.7;References;65 12;Chapter 5 Cholesterol-Dependent Cytolysins;73 12.1;Functional Studies on CDCs;75 12.2;Membrane Binding by CDCs;75 12.3;Pore Formation by CDCs;77 12.4;Proteolipid Pores;77 12.5;Oligomerisation A Mechanism for Membrane Insertion;78 12.6;Complex Effects of CDCs and Related Proteins;79 12.7;Conclusion;79 12.8;References;80 13;Chapter 6 Laetiporus sulphureus Lectin and Aerolysin Protein Family;84 13.1;Introduction;84 13.2;Pore-Forming Hemolytic Lectins;85 13.3;A New Member within the Aerolysin Family: The Crystal Structure of LSLa;86 13.3.1;The N-Terminal Lectin Module;87 13.3.2;The C-Terminal Pore-Forming Module;88 13.4;Oligomeric State of Water-Soluble LSLa;89 13.5;A Common Aerolysin-Like Pore-Forming Module Structure?;90 13.5.1;L-Domains;90 13.5.2;B-Domains;92 13.6;Other New Members in the Aerolysin Family: Basic Aerolysin Pore-Forming Motifs?;93 13.7;Conclusion;95 13.8;References;95 14;Chapter 7 Interfacial Interactions of Pore-Forming Colicins;98 14.1;Introduction;98 14.2;Structures;99 14.3;Receptor Binding;99 14.4;Translocation;99 14.5;Crossing the Periplasm;102 14.6;Inner Membrane Inserted Forms;103 14.7;Conclusion;104 14.8;References;104 15;Chapter 8 Permeabilization of the Outer Mitochondrial Membrane by Bcl-2 Proteins;108 15.1;Introduction;108 15.2;The Structure of the Bcl-2 Proteins;109 15.2.1;Structures of Water Soluble Forms;109 15.2.2;Membrane-Associated Conformation EAN/ISBN : 9781441963277 Publisher(s): Springer, Berlin, Landes Bioscience Discussed keywords: Protein Format: ePub/PDF Author(s): Anderluh, Gregor - Lakey, Jeremy

[DOWNLOAD HERE](#)

Similar manuals:

[The Protein Crunch - Jason Drew](#)

[Acceleration And Improvement Of Protein Identification By Mass Spectrometry](#)

[Advances In Protein Chemistry, Linkage Thermodynamics Of Macromolecular Interactions. Volume 48](#)

[Advances In Protein Chemistry, Volume 47](#)

[APC Proteins](#)

[Bacterial Protein Toxins](#)

[BCL-2 Protein Family](#)

[Cell Death Proteins. Vitamins And Hormones: Advances In Research And Applications, Volume 53.](#)

[Cholesterol Binding And Cholesterol Transport Proteins:](#)

[Coronin Family Of Proteins](#)

[ECTO-NOX Proteins](#)

[Elastomeric Proteins](#)

[Fluorescent Proteins I](#)

[Fluorescent Proteins II](#)

[Folding Of Disulfide Proteins](#)

[Formation And Cooperative Behaviour Of Protein Complexes On The Cell Membrane](#)

[From Protein Structure To Function With Bioinformatics](#)

[Functional And Structural Proteomics Of Glycoproteins](#)

[Glycoprotein And Proteoglycan Techniques. Laboratory Techniques In Biochemistry And Molecular Biology, Volume 16.](#)

[Heat Shock Proteins And The Brain](#)

[Heat Shock Proteins And Whole Body Physiology](#)

[Heat Shock Proteins In Cancer](#)

[Heat Shock Proteins](#)

[Membrane Protein-Cytoskeleton Interactions. Current Topics In Membranes, Volume 38.](#)

[Methods In Protein Biochemistry](#)

[Microbial Protein Toxins](#)

[Multistate GTPase Control Co-translational Protein Targeting](#)

[Non-fibrillar Amyloidogenic Protein Assemblies - Common Cytotoxins Underlying Degenerative Diseases](#)

[PEGylated Protein Drugs: Basic Science And Clinical Applications](#)

[Post-Transcriptional Regulation By STAR Proteins](#)

[Prokaryotic And Eukaryotic Heat Shock Proteins In Infectious Disease](#)

[Protein Condensation](#)

[Protein Folding And Misfolding](#)

[Protein Folding And Misfolding](#)

[Protein Function Prediction For Omics Era](#)

[Protein Interaction Networks](#)

[Protein Kinase C In Cancer Signaling And Therapy](#)

[Protein Metabolism And Homeostasis In Aging](#)

[Protein-protein Interactions And Networks](#)

[Protein-Protein Interactions As New Drug Targets](#)

[Proteins Membrane Binding And Pore Formation](#)

[Regulation Of Carcinogenesis, Angiogenesis And Metastasis By The Proprotein Convertases \(PC's\)](#)

[Structural Bioinformatics Of Membrane Proteins](#)

[Sustainable Protein Production And Consumption: Pigs Or Peas?](#)

[Tetramer Stability And Functional Regulation Of Tumor Suppressor Protein P53](#)

[The Eukaryotic Replisome: A Guide To Protein Structure And Function](#)

[Theory Of Phase Transitions In Polypeptides And Proteins](#)

[Vectorial Transport Of Proteins Into And Across Membranes. Methods In Cell Biology, Volume 34.](#)

[Biophysics Of DNA-Protein Interactions](#)

[G Protein-Coupled Receptors](#)