

<<生物化学原理>>

图书基本信息

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内容概要

《生物化学原理(影印版)》因其对最基本的生物化学原理进行精确、流畅、清晰的描述在国外受到广泛的赞扬。

作者Robert从事生物化学教学已30余年，具有丰富的教学经验。

全书共分为四大部分，包括导论、生物大分子的结构和功能、代谢动力学和遗传物质，章节之间保持较好的连贯性。

此版还增加了许多读者感兴趣的内容，并阐述了相关的最新研究进展。

在每一章后面都附有较全面的练习题，包括简答题、选择题和论述题，而且在书后对练习题做了详尽的解答，可以帮助学生更好地掌握生物化学基本原理。

《生物化学原理(影印版)》适合生物学类专业本科学生和研究生作为双语教材使用，并可供相关的研究工作者参考。

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作者简介

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书籍目录

PART ONE Introduction 1 Introduction to Biochemistry 2 Water

PART TWO Structure and Function of Biomolecules 3 Amino Acids and the Primary Structures of Proteins 4 Proteins: Three-Dimensional Structure and Function 5 Properties of Enzymes 6 Mechanisms of Enzymes 7 Coenzymes and Vitamins 8 Carbohydrates 9 Lipids and Membranes

PART THREE Metabolism and Bioenergetics 10 Introduction to Metabolism 11 Glycolysis 12 The Citric Acid Cycle 13 Additional Pathways in Carbohydrate Metabolism 14 Electron Transport and Oxidative Phosphorylation 15 Photosynthesis 16 Lipid Metabolism 17 Amino Acid Metabolism 18 Nucleotide Metabolism

PART FOUR Biological Information Flow 19 Nucleic Acids 20 DNA Replication, Repair, and Recombination 21 Transcription and RNA Processing 22 Protein Synthesis 23 Recombinant DNA Technology

PART ONE Introduction 1 Introduction to Biochemistry 31.1 Biochemistry Is a Modern Science 41.2 The Chemical Elements of Life 51.3 Many Important Biomolecules Are Polymers 8A. Proteins 8B. Polysaccharides 9C. Nucleic Acids 10D. Lipids and Membranes 121.4 The Energetics of Life 141.5 Biochemistry and Evolution 151.6 The Cell Is the Basic Unit of Life 151.7 Prokaryotic Cells: Structural Features 161.8 Eukaryotic Cells: Structural Features 17A. The Nucleus 17B. The Endoplasmic Reticulum and Golgi Apparatus 19C. Mitochondria and Chloroplasts 19D. Specialized Vesicles 20E. The Cytoskeleton 211.9 A Picture of the Living Cell 211.10 Biochemistry Is Multidisciplinary 23Appendix: The Special Terminology of Biochemistry 23Selected Readings 242 Water 252.1 The Water Molecule Is Polar 262.2 Hydrogen Bonding in Water 272.3 Ionic and Polar Substances Dissolve in Water 282.4 Nonpolar Substances Are Insoluble in Water 292.5 Noncovalent Interactions in Biomolecules 31A. Charge-Charge Interactions 31B. Hydrogen Bonds 31C. Van der Waals Forces 32D. Hydrophobic Interactions 332.6 Water Is Nucleophilic 332.7 Ionization of Water 352.8 The pH Scale 362.9 Acid Dissociation Constants of Weak Acids 372.10 Buffered Solutions Resist Changes in pH 40Summary 43Problems 43Selected Readings 45

PART TWO Structure and Function of Biomolecules 3 Amino Acids and the Primary Structures of Proteins 513.1 General Structure of Amino Acids 52Box 3.1 An Alternative Nomenclature 543.2 Structures of the 20 Common Amino Acids 55A. Aliphatic R Groups 55B. Aromatic R Groups 56C. Sulfur-Containing R Groups 57D. Side Chains with Alcohol Groups 57E. Basic R Groups 58E Acidic R Groups and Their Amide Derivatives 58G. The Hydrophobicity of Amino Acid Side Chains 583.3 Other Amino Acids and Amino Acid Derivatives 593.4 Ionization of Amino Acids 603.5 Peptide Bonds Link Amino Acids in Proteins 643.6 Protein Purification Techniques 663.7 Amino Acid Composition of Proteins 693.8 Determining the Sequence of Amino Acid Residues 703.9 Protein Sequencing Strategies 733.10 Comparisons of the Primary Structures of Proteins Reveal Evolutionary Relationships 77 Summary 78Problems 79Selected Readings 804 Proteins: Three-Dimensional Structure and Function 814.1 There Are Four Levels of Protein Structure 834.2 Methods for Determining Protein Structure 844.3 The Conformation of the Peptide Group 864.4 The α Helix 894.5 β Strands and β Sheets 924.6 Loops and Turns 944.7 Tertiary Structure of Proteins 96A. Supersecondary Structures 96B. Domains 97C. Domain Structure and Function 1024.8 Quaternary Structure 1024.9 Protein Denaturation and Renaturation 1044.10 Protein Folding and Stability 107A. The Hydrophobic Effect 107B. Hydrogen Bonding 109C. Van der Waals Interactions and Charge-Charge Interactions 110D. Protein Folding Is Assisted by Chaperones 1104.11 Collagen, a Fibrous Protein 1124.12 Structures of Myoglobin and Hemoglobin 1144.13 Oxygen Binding to Myoglobin and Hemoglobin 116A. Oxygen Binds Reversibly to Hemoglobin 116B. Oxygen-Binding Curves of Myoglobin and Hemoglobin 117C. Hemoglobin Is an Allosteric Protein 1194.14 Antibodies Bind Specific Antigens 121Summary 124Problems 125Selected Readings 1275 Properties of Enzymes 1305.1 The Six Classes of Enzymes 1315.2 Kinetic Experiments Reveal Enzyme Properties 133A. Chemical Kinetics 133B. Enzyme Kinetics 1345.3 The Michaelis-Menten Equation 135A. Derivation of the Michaelis-Menten Equation 137B. The Meanings of K_m 1385.4 Kinetic Constants Indicate Enzyme Activity and Specificity 1395.5 Measurement of K_m and V 1405.6 Kinetics of Multisubstrate Reactions 1415.7 Reversible Enzyme Inhibition 142A. Competitive Inhibition 143B. Uncompetitive Inhibition 145C. Noncompetitive Inhibition 146D. Uses of Enzyme Inhibition 1465.8 Irreversible Enzyme Inhibition 1475.9 Site-Directed Mutagenesis Modifies Enzymes 1485.10

<<生物化学原理>>

Regulation of Enzyme Activity 148A. Phosphofructokinase Is an Allosteric Enzyme 149B. General Properties of Allosteric Enzymes 150C. Two Theories of Allosteric Regulation 152D. Regulation by Covalent Modification 154

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章节摘录

插图：B. The Endoplasmic Reticulum and Golgi Apparatus A network of membrane sheets and tubules called the endoplasmic reticulum (ER) extends from the outer membrane of the nucleus. The aqueous region enclosed within the endoplasmic reticulum is called the lumen. In many cells, part of the surface of the endoplasmic reticulum is coated with ribosomes that are actively synthesizing proteins. As synthesis continues, the protein is translocated through the membrane into the lumen. In the case of membrane-spanning proteins, part of the protein remains embedded in the membrane after it is released from the ribosome. Proteins destined for export from the cell are completely extruded through the membrane into the lumen, where they are packaged in membranous vesicles. These vesicles travel through the cell and fuse with the plasma membrane, releasing their contents into the extracellular space. The synthesis of proteins destined to remain in the cytosol occurs at ribosomes that are not bound to the endoplasmic reticulum. Many enzyme systems involved in the metabolism of lipids are concentrated in regions of the endoplasmic reticulum that have no attached ribosomes. In many species, a complex of flattened, fluid-filled, membranous sacs called the Golgi apparatus is often found close to the endoplasmic reticulum and the nucleus. Vesicles that bud off from the endoplasmic reticulum fuse with the Golgi apparatus. The contents of the vesicles may be chemically modified as they pass through the layers of the Golgi apparatus. The modified products are then sorted, packaged in new vesicles, and transported to specific destinations inside or outside the cell.

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编辑推荐

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