Molecular Biology and Biotechnology: basic experimental protocols

M P Bansal
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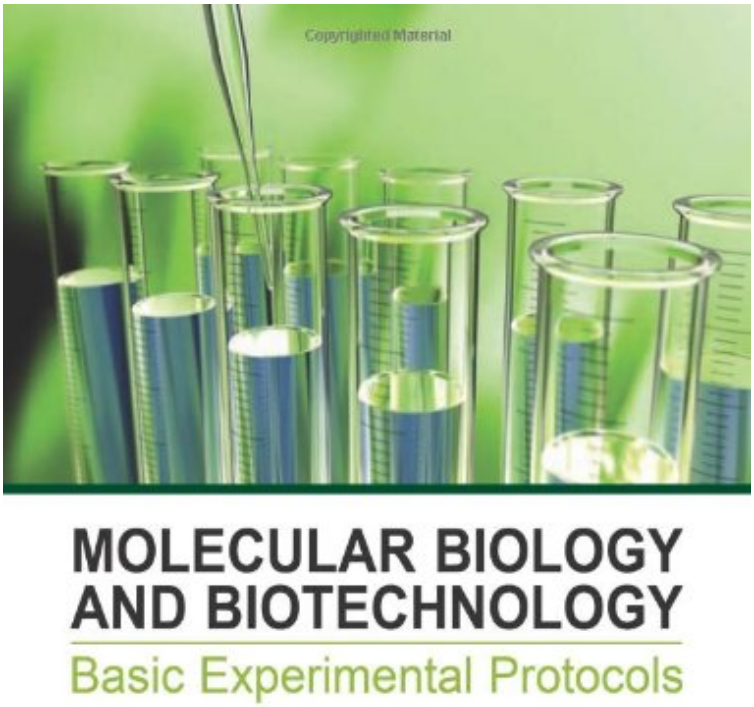

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M P Bansal : Molecular Biology and Biotechnology: basic experimental protocols before purchasing it in order to gage whether or not it would be worth my time, and all praised Molecular Biology and Biotechnology: basic experimental protocols:

Molecular Biology and Biotechnology: basic experimental protocolsis a compilation of methods and techniques commonly used in biomedical and biotechnological studies. The book aims to provide ample support to both students and faculty while conducting practical lessons. Four sections are covered in this book Genomics, Proteomics, Quantitative Biochemistry, and Bioinformatics. A concise introductory note accompanies each protocol/method described for better comprehension. Every topic discussed is supported by actual methods and their expected results, and is accompanied by relevant questions. Key features: Ready design of basic experiments in biomedical and biotechnology sciences. Extensive coverage of basic equipment used in biomedical and biotechnological studies.

Concise information on each subject, with focus on practical lessons. Contents: SECTION I: GENOMICS 1. Initial Characterization of DNA 2. DNA Probe Preparation, Southern Blotting, and Hybridization 3. RFLP and SSCP Analysis of DNA 4. Protein DNA Interaction 5. Plasmid DNA Analysis 6. Polymerase Chain Reaction 7. RNA Analysis Techniques 8. Gene or mRNA Expression in Cells/Tissues 9. Transcription Activity In Vivo 10. Apoptosis Analysis SECTION II: PROTEOMICS 11. Initial Preparations for Protein Analysis 12. Quantitative Determination of Proteins 13. Protein Separation and Analysis 14. Electroblotting, Dot/Slot Blotting, and Electroelution 15. Polyclonal Antibodies Production and Immunoanalysis 16. Protein protein Interactions SECTION III: QUANTITATIVE BIOCHEMISTRY 17. Analysis of Biomolecules 18. Enzyme Kinetics and Enzyme Activity Analysis 19. Labelling of Proteins and its Uses 20. Statistical Analysis of Biochemical Data SECTION IV: BIOINFORMATICS 21. Sequence Retrieval from Databases 22. Sequence Similarity Search 23. Protein Sequence and Structure Analysis 24. Nucleotide Sequence Analysis 25. Molecular Phylogeny