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# Polymerase Chain Reaction Theory and Technology



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The polymerase chain reaction (PCR) is a powerful research tool used in many scientific disciplines. It is also used for detection and testing in areas such as food microbiology, environmental microbiology, biotechnology, industrial microbiology, veterinary and medical diagnostics.

This indispensable manual is a compilation of review articles written by experts in the field of PCR technology. Topics covered include: principles of PCR, fluorescent chemistries, instrumentation, quantification strategies, extraction and purification of nucleic acids, sample preparation, controls for validation, primers and probes, standardization of methods, MIQE guidelines, mRNA expression and PCR arrays.

This book provides a comprehensive overview of PCR theory, instrumentation and methods. The book represents an excellent, detailed guide for anyone interested in the development and use of PCR technology. It is a recommended purchase for all microbiology and molecular biology laboratories and university libraries.

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