

Polymerase Chain Reaction (PCR) Technologies and Global Markets

Market Research Report | 2023-12-29 | 192 pages | BCC Research

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Report description:

Description

Report Scope:

This research study analyzes the PCR market, offers revenue forecasts, assesses future trends, and provides strategic recommendations for the success of market participants. The scope of the study is global. This report estimates market data for 2022 (the base year) and forecasts for 2023 through 2028. Figures for 2023 are estimated, except where actual results are reported. This report includes forecasts by product type, technique, application, and region from 2023 through 2028.

The report also analyzes leading and emerging competitors in the current worldwide PCR market.

Report Includes:

- 49 data tables and 65 additional tables
- An overview and up-to-date analysis of the global markets for the polymerase chain reaction (PCR) technologies
- Analyses of the global market trends, with historical market revenue data (sales figures) from 2021 to 2022, estimates for 2023, forecasts for 2024, and projections of compound annual growth rates (CAGRs) through 2028
- Estimate of the actual market size and revenue forecast for the PCR markets in USD millions, and corresponding market share analysis based on product, technique, application, and region
- In-depth information (facts and figures) pertaining to the major market dynamics, R&D efforts, current status on MedTech, upcoming technologies, future demand in clinical diagnostics, and regulatory scenarios; and the impacts of COVID-19 pandemic on the worldwide market
- Identification of the companies that are best positioned to meet the surging demand for innovations in PCR technology, owing to or in conjunction with their proprietary technologies, strategic alliances, and other competitive advantages

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- Discussion of sustainability trends and factors in emerging materials in the PCR market, with emphasis on consumer attitudes, ESG score analysis, future of ESG, and the ESG practices followed
- An overview of the major vendors in the global PCR market along with an analysis of the structure of the industry, including company market shares and recent mergers and acquisitions (M&A) activity
- Review of both new and existing patents on PCR technologies and their applications in molecular diagnosis of infectious diseases
- Profiles of the leading global players, including F. Hoffmann-LaRoche, Thermo Fisher Scientific Inc., Bio-Rad Laboratories Inc., Becton, Dickinson and Company, and Danaher Corp.

Executive Summary

Summary:

PCR is a powerful molecular biology technique/tool. From diagnostics, research, and agriculture to forensics and environmental science, PCR techniques are an essential element in the arsenal of today's scientists. Although the fundamental concept of PCR has remained unchanged over the years, novel PCR methods/protocols have continued to advance. With the recent inclination toward genomic and biomarker research and development, demands for advanced PCR technologies to study nucleic acid samples in greater detail have increased significantly.

During the COVID-19 period (2020 to 2022), quantitative real-time reverse transcription PCR (RT-qPCR) enabled widespread screening and rapid detection of the COVID-19 virus. Laboratories significantly expanded the installed equipment base and increased RT-qPCR testing capacity to meet the sharply increased demand. The global market for quantitative real-time PCR (qPCR) had reached around \$REDACTED billion in 2021, driven by significantly high demand for COVID-19 PCR tests. As the pandemic subsided in late 2022, the PCR market is expected to attain the pre-pandemic level and value around \$REDACTED billion in 2023. The market is projected to reach \$REDACTED billion and grow at a CAGR of REDACTED% through 2028. Given the qPCR advantages over the endpoint PCR methods (higher sensitivity, specificity, speed, quantitative analysis, wider range of applications, etc.), the qPCR market is expected to grow rapidly in the next five years.

Multiplex PCR is a rapidly growing market. This market is expected to reach \$REDACTED billion through 2028, at a CAGR of REDACTED% through the forecast period. The advantages of multiplex PCR in terms of efficiency, cost-effectiveness, time-savings, and data quality make it a valuable tool in molecular biology, genetics, clinical diagnostics, and many other fields.

dPCR is the fastest-growing PCR technology. Prized for the highly precise standard curve-free absolute quantification, dPCR is rapidly gaining momentum in research and clinical laboratories for absolute quantification of viral load, nucleic acid standards, NGS libraries, and gene expression.

Table of Contents:

- Table of Contents
- Chapter 1 Introduction
 - Study Goals and Objectives
 - Reasons for Doing This Study
 - Scope of Report
 - What's New in This Update?
 - Methodology and Information Sources
 - Geographic Breakdown
 - Segmentation Breakdown
- Chapter 2 Summary and Highlights
- Market Outlook

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Highlights of the PCR Market
Chapter 3 Market Overview
Overview
Evolution of PCR
Principles of PCR
Instruments and Components of PCR
Instruments
Target DNA
Primers
Enzyme and Enzyme Concentration
Buffers
Magnesium Concentration
Deoxyribonucleoside Triphosphates
Traditional vs. Real-Time PCR
Design of Primers for PCR
Primer Selection
Primer Length
Melting Temperature
Specificity
G/C Content
3' End Sequence
PCR Quantification Methods
Absolute Quantification
Relative Quantification
Components of Quantitative PCR
DNA Binding Dyes
Probes in qPCR
Controls for qPCR Experiments
Chapter 4 Market Dynamics
Market Drivers
COVID-19
Technology Advancements
Growing Demand in Clinical Diagnostics
Growth in Genomic and Biomarker Research
Robust Demand in Industrial Applications
Market Challenges
High Investment Cost
Lack of Trained Professionals
Technical Limitations and Competition from Alternative Technologies
Stringent Regulatory Landscape
Key Factors, Impact on Market
Chapter 5 Market Breakdown by Technique
Market Overview
Standard PCR (PCR)
Reverse Transcription PCR (RT-PCR)
Quantitative Real-Time PCR
Quantitative Real-Time PCR (qPCR)

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Quantitative Real-Time Reverse Transcription PCR (RT-qPCR)

Multiplex PCR

Digital PCR (dPCR)

Other PCR Techniques

Nested

Touchdown

Hot-Start

Inverse PCR

Market Revenue by Technique

Quantitative Real-Time PCR (qPCR and RT-qPCR)

Standard PCR

Reverse Transcription PCR (RT-PCR)

Multiplex PCR

Digital PCR (dPCR)

Other PCRs

Chapter 6 Market Breakdown by Product

Market Overview

Global Market for PCR, by Product

Instruments

Market Overview

Market Revenue by Type

Market Revenue by Region

Reagents and Consumables

Market Overview

Market Revenue by Type

Market Revenue by Region

Software and Services

Market Overview

Market Revenue by Type

Market Revenue by Region

Chapter 7 Market Breakdown by Application

Overview

Basic Research Applications

Market Overview

Market Revenue by Region

Clinical Applications

Market Overview

Market Revenue by Region

Industrial Applications

Market Overview

Market Revenue by Region

Chapter 8 Market Breakdown by Region

Market Overview

Market Revenue, by Region

North America

Market Revenue, by Country

Europe

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Market Revenue, by Country
Asia-Pacific
Market Revenue, by Country
Rest of the World (RoW)
Chapter 9 ESG Development
Introduction to ESG
Sustainability in PCR Industry: An ESG Perspective
Key Environmental Issues
Industry ESG Performance Analysis
Concluding Remarks from BCC Research
Chapter 10 Emerging Technologies and Developments
Overview
Digital PCR
Multiplex PCR Syndromic Testing
Point-of-Care & Decentralization of PCR Testing
Isothermal Nucleic Acid Amplification Techniques (INAATs)
PCR Automation
Chapter 11 Patent Analysis
Patents
PubMed
Chapter 12 Competitive Intelligence
Overview
Instruments
Reagents, Consumables, and Accessories
Leading players
Mergers and Acquisitions
Chapter 13 Company Profiles
ABBOTT
AGILENT TECHNOLOGIES, INC.
BECTON, DICKINSON AND CO.
BIOMERIEUX
BIO-RAD LABORATORIES INC.
DANAHER
EPPENDORF SE
EUROFINS SCIENTIFIC
F. HOFFMANN-LA ROCHE LTD.
HOLOGIC
MERCK KGAA
QIAGEN
STANDARD BIOTOOLS INC.
SYSMEX INOSTICS, INC.
TAKARA BIO INC.
THERMO FISHER SCIENTIFIC INC.
Chapter 14 Appendix: Acronyms

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