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

- 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.

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