+357 96 030922
info@marketpublishers.com

# Epigenetics Diagnostics Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034

https://marketpublishers.com/r/EB1B906EBDC9EN.html
Date: May 2025
Pages: 133
Price: US$ 4,850.00 (Single User License)
ID: EB1B906EBDC9EN

## Abstracts

The Global Epigenetics Diagnostics Market was valued at USD 15.5 billion in 2024 and is estimated to grow at a CAGR of 16.5% to reach USD 70.7 billion by 2034. The market is gaining momentum due to the rising awareness of how epigenetic mechanisms contribute to disease development, especially in complex and chronic conditions. The continuous evolution of diagnostic technologies is another key factor driving growth. Increasing cases of chronic illnesses and cancer globally have created a pressing demand for early and accurate detection methods. This, in turn, has fueled the need for advanced epigenetic biomarkers and testing assays.

Additionally, the expanding use of next-generation sequencing technologies and AI-powered analytics has significantly improved the efficiency and scalability of epigenetic diagnostics. The growing preference for non-invasive procedures like liquid biopsies has further encouraged market adoption. Collaborations among pharmaceutical manufacturers, research bodies, and diagnostics firms are increasing to develop safer and more effective diagnostic tools. These initiatives are helping accelerate the transition of epigenetic diagnostics from research labs to mainstream clinical use. With heightened interest in precision medicine, the industry is seeing a sharp focus on the development of highly accurate and scalable solutions that support early intervention and personalized treatment strategies.

The market centers on technologies used to detect and analyze epigenetic markers, including DNA methylation and histone modifications, which are pivotal in identifying disease risks and progression. These diagnostics offer valuable insights for early-stage diagnosis and treatment planning across a range of conditions, including cancer and neurological disorders. Based on product type, the market is segmented into

+357 96 030922
info@marketpublishers.com

instruments, kits and reagents, and software and services. In 2024, the kits and reagents category led the market with a valuation of USD 7.6 billion. These products are integral to routine diagnostic workflows and are extensively used in clinical settings, academic research, and pharmaceutical development. Their ease of use, reliability, and compatibility with automated and high-throughput systems such as PCR and sequencing platforms make them widely preferred. Continuous improvements in assay sensitivity and integration with advanced technologies are driving further adoption. Additionally, the increasing emphasis on environmentally sustainable and cost-effective reagent development has enhanced accessibility, particularly in developing regions.

In terms of application, the epigenetics diagnostics market is split between oncology and non-oncology diagnostics. The oncology diagnostics segment commanded a dominant share of 68.7% in 2024. This growth is propelled by the demand for early and precise cancer detection using epigenetic markers. DNA methylation and histone changes are commonly linked to various forms of cancer and serve as effective indicators for early diagnosis. The rising number of cancer cases, coupled with the shift toward personalized therapies, has heightened interest in epigenetic diagnostics. Awareness campaigns and initiatives promoting early detection and treatment are also playing a pivotal role in expanding this segment.

Based on technology, the market includes DNA methylation, histone methylation, microRNA modification, chromatin structure analysis, and other methods. DNA methylation dominated the landscape with a value of USD 6.3 billion in 2024 and is projected to reach USD 28.5 billion by 2034. This segment’s strength lies in its capacity to identify disease-specific methylation markers, enabling earlier and more accurate diagnoses. Techniques like bisulfite sequencing, methylation-specific PCR, and array-based assays have advanced the precision of methylation studies, allowing for more effective disease monitoring. Integration of these methods with next-generation sequencing tools continues to improve test sensitivity and throughput, making them increasingly valuable in both research and clinical settings.

By end user, the market is divided into hospitals and clinics, pharmaceutical and biotechnology companies, diagnostic laboratories, and others. Hospitals and clinics led the market in 2024 and are expected to reach USD 25.9 billion by 2034. These institutions play a vital role in deploying epigenetic testing for diagnostics, prognosis, and treatment monitoring. Their infrastructure and expertise allow for comprehensive testing and interpretation, including genetic counseling and interdisciplinary collaboration. The trend toward precision medicine has further boosted demand within hospitals, which often serve as central hubs for patient care and advanced diagnostics.

+357 96 030922
info@marketpublishers.com

Regionally, North America held the largest share in 2024, accounting for 39.7% of the global market. The U.S. alone was valued at USD 5.4 billion in the same year. Factors contributing to the region's dominance include robust healthcare infrastructure, high investments in genomic research, and increased adoption of precision diagnostics. Government initiatives and funding support, especially from research bodies, have helped accelerate innovation in epigenetics. The growing burden of chronic diseases and a strong emphasis on non-invasive diagnostics continue to propel demand in the region.

Leading companies— Thermo Fisher Scientific, Illumina, QIAGEN, Agilent Technologies, and Roche Diagnostics—collectively held around 65% of the market share. These firms stay ahead through continuous innovations in sequencing systems, methylation detection tools, and integrated bioinformatics. Their expanding portfolios, including single-cell analysis and targeted panels, align with the rising demand for tailored diagnostic solutions.

**Companies Mentioned**

Abcam, Agilent Technologies, Diagenode, Dovetail Genomics, Element Biosciences, Illumina, Merck, New England Biolabs, PacBio, Promega, QIAGEN, Roche Diagnostics, Thermo Fisher Scientific, Zymo Research

+357 96 030922
info@marketpublishers.com

# Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com



## CHAPTER 10 COMPANY PROFILES

+357 96 030922
info@marketpublishers.com

## I would like to order

Product name: Epigenetics Diagnostics Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034

Product link: https://marketpublishers.com/r/EB1B906EBDC9EN.html

Price: US$ 4,850.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/EB1B906EBDC9EN.html