

Comprehensive Report on the Functional Genomics Market: Opportunities and Challenges

*The Business Research Company's
Comprehensive Report on the Functional
Genomics Market: Opportunities and
Challenges*

LONDON, GREATER LONDON, UNITED
KINGDOM, October 13, 2025

/EINPresswire.com/ -- "Get 20% Off All
Global Market Reports With Code

ONLINE20 – Stay Ahead Of Trade Shifts, Macroeconomic Trends, And Industry Disruptors

The logo for The Business Research Company, featuring a stylized bar chart with three bars of increasing height, colored in teal and dark blue. The text "The Business Research Company" is written in a serif font to the left of the chart.

The Business
Research Company

The Business Research Company

What Is The Expected Cagr For The Functional Genomics Market Through 2025?

The size of the functional genomics market has seen significant expansion recently. The market size is projected to surge from \$12.96 billion in 2024 to \$14.84 billion in 2025, demonstrating a compound annual growth rate (CAGR) of 14.5%. Factors contributing to the growth experienced in the historical period include an escalating emphasis on gene expression studies, greater utilization of functional assays in drug discovery, an increase in biotechnology companies, heightened development of high-throughput screening techniques, and the growing integration of bioinformatics in genomics

“

Expected to grow to \$25.19 billion in 2029 at a compound annual growth rate (CAGR) of 14.2%”

*The Business Research
Company*

research.

The size of the functional genomics market is anticipated to experience substantial growth over the coming years, expanding to \$25.19 billion in 2029, with a compound annual growth rate (CAGR) of 14.2%. This projected growth during the forecasted period can be linked to an increasing emphasis on precision medicine, a greater uptake of multi-omics methods, an escalating demand for sophisticated genetic tests, the expanding use of functional genomics in the field of oncology, and an increase in research and development investments. Key trends predicted for this period include advancements in single-cell sequencing technologies, the progress of cloud-based genomic data platforms, innovations in high-throughput functional

screening procedures, advancements in the union of genomics and proteomics, and the emergence of individualized therapeutic strategies through the use of functional genomics.

Download a free sample of the functional genomics market report:

<https://www.thebusinessresearchcompany.com/sample.aspx?id=28228&type=smp>

What Are The Driving Factors Impacting The Functional Genomics Market?

The growth of the functional genomics market is projected to accelerate due to increased investment in research and development. This organized endeavor to innovate, enhance, and invent products, processes, or knowledge through intensive study and experimentation is experiencing a surge in investment. Companies are pouring more resources into this arena, driven by the pressing need to keep innovating and remain competitive in their respective fields. Not only does this achieve the development of new products and technological advancements, but it also allows firms to seize opportunities in emerging markets. Functional genomics benefit significantly from these investments as they aid in the progress of identifying and analyzing gene functions. This contributes to a deeper understanding of complicated biological processes and enables the development of precise treatments. For example, the UK government, via the Department of Health and Social Care, in December 2022, announced an investment of £105 million in an effort to expedite the diagnosis of rare genetic conditions in newborns, aiming to offer potentially life-saving treatments for many infants. This fund will facilitate research aimed at propelling genomic healthcare through the study of patients' DNA. Therefore, the functional genomics market's growth is being fueled by this surge in research and development investment.

Which Players Dominate The Functional Genomics Industry Landscape?

Major players in the Functional Genomics Global Market Report 2025 include:

- Hoffmann-La Roche Ltd.
- Thermo Fisher Scientific Inc.
- Merck KGaA
- Becton Dickinson and Company
- Agilent Technologies Inc.
- Illumina Inc.
- Perkin Elmer Inc.
- Revvity Inc.
- Exact Sciences Corporation
- Bio-Rad Laboratories Inc.

What Are The Major Trends That Will Shape The Functional Genomics Market In The Future?

In the functional genomics market, leading organizations are honing in on advanced methods like high-throughput sequencing to offer comprehensive and precise insights into intricate genomes. This technique allows for quick, concurrent sequencing of substantial volumes of DNA or RNA, enabling large-scale genetic information analysis. Take Roche, a pharmaceutical company based in Switzerland, as an example. In February 2025, they introduced a new category

of next-generation sequencing known as sequencing by expansion (SBX) technology. This technology, which employs SBX chemistry alongside a state-of-the-art sensor module, facilitates highly efficient, high-throughput sequencing which can be customized and expanded to suit various applications. This revolutionary procedure converts DNA or RNA sequence into an easily detectable surrogate polymer, referred to as an Xpandomer, through a specific biochemical operation. These Xpandomers, which are fifty times longer than the initial nucleic acid, transform sequence data into potent, low-interference signals that can be detected with ease and precision. This method offers standout single-molecule nanopore sequencing with both speed and versatility, thanks to the use of a CMOS-based sensor that performs parallel processing.

Global Functional Genomics Market Segmentation By Type, Application, And Region

The functional genomics market covered in this report is segmented as

- 1) By Product: Kits And Assays, Instruments
- 2) By Technology: Next-Generation Sequencing (NGS), Microarray Analysis, CRISPR And Gene Editing Technologies, RNA Sequencing (RNA-Seq)
- 3) By End-User: Academic And Research Institutes, Pharmaceutical And Biopharmaceutical Companies, Contract Research Organizations (CROs), Clinical Laboratories, Agricultural Biotechnology Companies

Subsegments:

- 1) By Kits And Assays: PCR Kits, Microarray Kits, NGS Kits, Reagents, Enzymes
- 2) By Instruments: Sequencers, Microarray Scanners, PCR Instruments, Automation Systems

View the full functional genomics market report:

<https://www.thebusinessresearchcompany.com/report/functional-genomics-global-market-report>

Which Region Holds The Largest Market Share In The Functional Genomics Market?

In the 2025 Functional Genomics Global Market Report, North America holds the leading position for the specified year. Projected growth indicates that the Asia-Pacific region will experience the quickest expansion during the estimated period. The report takes into account regions such as Asia-Pacific, Western Europe, Eastern Europe, North America, South America, the Middle East, and Africa.

Browse Through More Reports Similar to the Global Functional Genomics Market 2025, By [The Business Research Company](https://www.thebusinessresearchcompany.com)

Genomics Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/genomics-global-market-report>

Metagenomics Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/metagenomics-global-market-report>

Genomics Services Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/genomics-services-global-market-report>

Speak With Our Expert:

Saumya Sahay

Americas +1 310-496-7795

Asia +44 7882 955267 & +91 8897263534

Europe +44 7882 955267

Email: saumyas@tbrc.info

The Business Research Company - www.thebusinessresearchcompany.com

Follow Us On:

• LinkedIn: <https://in.linkedin.com/company/the-business-research-company>"

Oliver Guirdham

The Business Research Company

+44 7882 955267

info@tbrc.info

Visit us on social media:

[LinkedIn](#)

[Facebook](#)

[X](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/857020088>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.