

## Biochips Market Overview, SWOT Analysis By Abbott, Agilent Technologies, Bio-Rad Laboratories, Inc., Danaher Corporation

Biochips market is experiencing significant growth, with its value reaching USD 9.64 billion in 2022

VANCOUVER, BRITISH COLUMBIA, CANADA, March 26, 2025
/EINPresswire.com/ -- The new report titled 'Global Biochips Market', published by Emergen Research, is methodically curated by our team of analysts, keeping readers' understanding in mind, and includes a wide-ranging database of industry distribution. The report takes a closer



look at the historical and current market scenarios to accurately predict the global Biochips market outlook over the forecast duration (2024-2032).

The global biochips market is experiencing significant growth, with its value reaching USD 9.64 billion in 2022. The market is expected to continue expanding at a rapid pace, registering a compound annual growth rate (CAGR) of 12.1% during the forecast period. This surge is primarily driven by the rising adoption of biochips for biomolecule, protein, and DNA analysis, making them crucial in healthcare and research applications.

## **Key Growth Drivers**

One of the major factors fueling market expansion is the increasing use of biochips equipped with biosensors for detecting and screening biological materials such as enzymes, proteins, and DNA. These advanced devices play a vital role in health profiling, disease screening, diagnosis, and personalized medical treatments.

The growing prevalence of noncommunicable diseases (NCDs) is another important driver. According to the World Health Organization (WHO), NCDs account for 74% of global deaths annually, highlighting the urgent need for efficient diagnostic tools such as biochips.

Moreover, substantial funding from pharmaceutical companies, research institutions, and government bodies is boosting the development of biochip technologies. The European Union's Horizon Europe program has committed USD 7.72 billion for health research funding until 2027. Similarly, the Israel Innovation Authority has allocated USD 31 million for R&D infrastructure to enhance biochip-based biodevice production.

DOWNLOAD FREE SAMPLE REPORT: <a href="https://www.emergenresearch.com/request-sample/2720">https://www.emergenresearch.com/request-sample/2720</a>

Collaborative efforts are also shaping the market, with key players working together to accelerate innovation in biochip technologies such as Lab-On-A-Chip (LOC) and Organs-On-Chips (OoCs). For example, in July 2023, DLOC Biosystems partnered with 42 Technology to develop an automated human-on-chip system. Additionally, the integration of artificial intelligence (AI) and machine learning (ML) into biochips is enhancing disease detection and personalized treatment approaches.

## Challenges Restraining Market Growth

Despite strong growth prospects, certain challenges could hinder market expansion. Stringent regulatory requirements imposed by agencies such as the U.S. Food and Drug Administration (FDA) and the European Medicines Agency (EMA) can slow down the commercialization of biochips, affecting overall market dynamics. Additionally, high acquisition costs due to expensive R&D and advanced manufacturing technologies, including microarray and signal processing, pose financial challenges for industry players.

## Market Segmentation Insights

The biochips market is segmented based on chip type and application, with significant variations in growth patterns across these segments.

Chip Type Analysis: The Lab-On-A-Chip segment held the largest market share in 2022 due to its cost-effectiveness and ability to provide faster and more precise results than traditional laboratory methods. This technology is widely used in human diagnostics, DNA analysis, and chemical synthesis, making it an essential tool in healthcare. Meanwhile, the Microarray segment is expected to witness steady growth, as it enables the genotyping of thousands of loci simultaneously, aiding in genetic research and cancer diagnosis.

Application Analysis: The Drug Discovery segment is projected to dominate the market, driven by the need for biochips in identifying potential drug targets and genetic attributes associated with diseases. Pharmaceutical companies are leveraging biochips to streamline drug candidate selection. In June 2023, ACRO Biosystems partnered with Diagnostic Biochips to develop biochipenabled in vivo electrophysiology solutions for neuroscience research, further boosting this segment's growth.

The Clinical Diagnostics segment is also anticipated to grow steadily, fueled by the increasing use of biochips in identifying genetic and chronic diseases. The development of advanced biochips incorporating DNA, RNA, and protein-based technologies is playing a crucial role in improving diagnostics and prognostics in healthcare.

Request Customization: <a href="https://www.emergenresearch.com/industry-report/biochips-market">https://www.emergenresearch.com/industry-report/biochips-market</a>

The global Biochips industry is highly consolidated owing to the presence of renowned companies operating across several international and local segments of the market. These players dominate the industry in terms of their strong geographical reach and a large number of production facilities. The companies are intensely competitive against one another and excel in their individual technological capabilities, as well as product development, innovation, and product pricing strategies.

Some major companies included in the Biochips market report are:

Abbott, Agilent Technologies, Bio-Rad Laboratories, Inc., Danaher Corporation, Standard BioTools, Thermo Fisher Scientific Inc., PerkinElmer Inc., Micronit B.V., Illumina, Inc., BIOMÉRIEUX, QIAGEN, Synbio Technologies, Hoffmann-La Roche Ltd., GE HealthCare, Cepheid, BioNTech SE, Personalis, Inc., NantHealth, Inc., Oxford Nanopore Technologies, Bionano Genomics

The report covers key points of the market, including the standards, regulations, and policy changes applied by the government on the industry for the coming years. The report encompasses thorough research carried out by the application of advanced analytical tools such as SWOT analysis and Porter's Five Forces analysis to pinpoint the growth trends and patterns. Factors likely to influence the growth of the market, current trends, opportunities, restraining factors, and business landscape are discussed in-depth in the market study.

**Biochips Market Segmentation Analysis** 

For the purpose of this report, Emergen Research has segmented the global biochips market on the basis of chip type, product, application, end-use, and region:

Chip type Outlook (Revenue, USD Billion; 2019-2032)

Lab on a chip

Micro array

Product Outlook (Revenue, USD Billion; 2019-2032)

Instruments

Reagents and consumables Application Outlook (Revenue, USD Billion; 2019-2032) Clinical diagnostics Drug discovery Genomics and proteomics Others End-Use Outlook (Revenue, USD Billion; 2019-2032) Biotech companies Hospitals Diagnostics center Research institutes Browse Full Report: <a href="https://www.emergenresearch.com/industry-report/biochips-market">https://www.emergenresearch.com/industry-report/biochips-market</a> Regional Outlook: North America (the U.S., Canada, Mexico) Europe (the U.K., Germany, France, Italy) Asia Pacific (India, China, Japan, Korea) Latin America (Brazil, Argentina, Ecuador, Chile) Middle East & Africa (Egypt, Turkey, Saudi Arabia, Iran) Key reasons to buy the Global Biochips Market report: The latest report comprehensively studies the global Biochips market size and provides useful inference on numerous aspects of the market, such as the current business trends, market

share, product offerings, and product share.

The report offers an insightful analysis of the regional outlook of the market.

It offers a detailed account of the end-use applications of the products & services offered by this industry.

The report holistically covers the latest developments taking place in this industry. Therefore, it lists the most effective business strategies implemented by the market rivals for ideal business expansion.

Thank you for reading our report. For further details or to inquire about customization, please let us know and we will offer you the report as per your needs.

Eric Lee
Emergen Research
+ +91 90210 91709
sales@emergenresearch.com
Visit us on social media:
Facebook
X
LinkedIn

This press release can be viewed online at: https://www.einpresswire.com/article/797236731

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.