

Global DNA Read, Write, and Edit Market

Market Research Report | 2026-03-10 | 142 pages | BCC Research

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Report description:

Description

Report Scope

The scope of the global DNA read, write, and edit market study encompasses market size analysis, as well as a detailed examination of the competitive environment, market dynamics, ongoing research, and driving trends driving market growth. The market has been segmented based on technology, application, and region.

The report provides an overview of the global DNA read, write, and edit market, analyzing market trends. It includes global revenue (\$ Million) for the base year 2024 and estimated data for the forecast period 2025 through 2030.

The report covers the total market for DNA read, write, and edit, which includes DNA sequencing, DNA writing, and gene editing. Applications for these products in clinical, research, and other applied areas are also included in the report. The report also focuses on the regional segmentation of the market. The regions covered in this study include North America, Europe, the Asia-Pacific, and the Rest of the World, with a focus on major countries in these regions.

The report focuses on the major driving trends and challenges that affect the market and vendor landscape. It analyzes environmental, social, and corporate governance (ESG) developments and emerging technologies related to the market. It also covers a section on the regulatory landscape of the industry.

The report concludes with an analysis of the competitive landscape and industry structure. It also has a dedicated section of company profiles that covers details of leading companies in the market.

Report Includes

- 89 data tables and 59 additional tables
- An overview of the global market for DNA read, write and edit technologies
- In-depth analysis of global market trends, featuring historical revenue data for 2022-2024, estimated figures for 2025, as well as forecasts for 2030. This analysis includes projections of compound annual growth rates (CAGRs) through 2030
- Evaluation of the current market size and revenue growth prospects specific to DNA read, write and edit technologies, accompanied by a market share analysis by technology, application, and region

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- Analysis of current and future demand in the global DNA read, write and edit technologies, along with a detailed analysis of the competitive environment, market regulations and reimbursement practices
- Analysis of drivers, challenges, and opportunities affecting market growth
- Information on sequencing technologies, market applications, industry structure, and important clinical sequencing initiatives
- A look at the evolving technologies, the current and future market potential, R&D activities, growth strategies, new product pipeline, and ESG trends of the market
- Market share analysis of the key market participants, along with their research priorities, product portfolios, global rankings and company competitive landscape
- Company profiles of major players within the industry, including Illumina Inc., Thermo Fisher Scientific Inc., QIAGEN, Oxford Nanopore Technologies plc., and BGI

Executive Summary

Summary:

The global market for DNA read, write, and edit was valued at \$25.9 billion in 2025 and is estimated to reach \$67.7 billion by 2030, at a compound annual growth rate (CAGR) of 21.2% from 2025 through 2030.

The DNA read, write, and edit market encompasses a combination of technologies, including DNA sequencing, gene synthesis, and gene editing. Gene editing is a technique that precisely alters the genome sequence to introduce insertions, deletions, or base substitutions. This technology holds promise for controlling diseases at the genetic level, particularly those genetic disorders caused by mutations in a single gene, as many diseases are associated with changes in gene expression in vivo. The clustered regularly interspaced short palindromic repeats (CRISPR)/CRISPR-associated protein 9 (Cas9) system is the most used gene editing technique. For DNA sequencing, next-generation sequencing (NGS) is the most widely used method. However, there is a growing focus on third-generation sequencers that are highly affordable and can provide real-time analysis. For DNA synthesis, pharmaceutical companies and researchers engage with custom gene synthesis companies.

Table of Contents:

Table of Contents

Chapter 1 Executive Summary

Market Outlook

Scope of Report

Market Summary

Market Dynamics and Growth Factors

Emerging Technologies

Segmental Analysis

Regional Analysis

Conclusion

Chapter 2 Market Overview

Overview

Sequencing Technologies

Sanger Sequencing

Third-Generation Sequencing

Gene Synthesis Processes

Solid Phase Chemical Synthesis

Genome Editing Technologies

Meganucleases

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Zinc Finger Nucleases (ZFNs)
Transcription Activator-like Effector Nucleases (TALENs)
Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR)/CRISPR-associated Protein 9 (Cas9)
Porter's Five Forces Analysis in the DNA Read, Write, and Edit Market
Macroeconomic Factor Analysis
U.S. Tariffs
Geopolitical Factors
Increasing Healthcare Expenditures
Chapter 3 Market Dynamics
Market Dynamics
Market Drivers
Growing Need for Early Detection of Chronic Diseases
Increasing Prevalence of Infectious Diseases
Growing Private Funding for Genome Editing
Market Restraints
Complex and Evolving Regulatory Landscape
High Costs of Sequencing Instruments
Off-Target Impacts of CRISPR Technology
Market Opportunities
Expanding Clinical Applications of Genome Editing
Applications in Plant and Livestock Breeding
Development of Next-Generation CAR-T Therapies
Chapter 4 Regulatory Landscape
Regulatory Paths for Genome Editing
North America
Europe (EU)
Asia-Pacific
Regulatory Landscape Across the Rest of the World
Chapter 5 Emerging Technologies
Key Takeaways
Emerging Technologies
Advances in Sequencing Technologies
In Vivo Delivery of CRISPR
CRISPR-Based Diagnostics
Artificial Intelligence (AI) in DNA Data Analysis
Chapter 6 Market Segmentation Analysis
Segmentation Breakdown
Market Analysis by Technology
Key Takeaways
DNA Read (Sequencing)
DNA Write (Synthesis)
DNA Edit (Genome Editing)
Market Analysis by Application
Key Takeaways
Clinical Applications
Research
Applied

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Geographic Breakdown
Market Analysis by Region
Key Takeaways
North America
Europe
Asia-Pacific
Rest of the World
Chapter 7 Competitive Intelligence
Key Takeaways
Industry Structure
Competitive Analysis of the DNA Read Market
Strategic Analysis
Funding Outlook
Chapter 8 Sustainability in the DNA Read, Write, and Edit Market: An ESG Perspective
Introduction to ESG
ESG Practices in the DNA Read, Write, and Edit Industry
Environmental Performance
ESG Risk Ratings
Conclusion
Chapter 9 Appendix
Methodology
Sources
Acronyms
Company Profiles
AGILENT TECHNOLOGIES INC.
BEAM THERAPEUTICS
CHARLES RIVER LABORATORIES
EUROFINS GENOMICS
F. HOFFMANN-LA ROCHE LTD.
GENSCRIPT
ILLUMINA INC.
INTEGRATED DNA TECHNOLOGIES INC.
MERCK KGAA
OXFORD NANOPORE TECHNOLOGIES PLC.
PACBIO
QIAGEN
REVVITY
THERMO FISHER SCIENTIFIC INC.
VERTEX PHARMACEUTICALS INC.
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