

DNA Synthesis Market to Reach \$10.87 Billion by 2029 with 20.3% CAGR

The Business Research Company's DNA Synthesis Global Market Report 2025 – Market Size, Trends, And Global Forecast 2025-2034

LONDON, GREATER LONDON, UNITED KINGDOM, August 20, 2025
/EINPresswire.com/ -- What Is The Expected Cagr For The [DNA Synthesis Market](#) Through 2025?

The Business
Research Company

The Business Research Company



The [DNA synthesis market size](#) has escalated rapidly over recent years. The market is predicted to catapult from \$4.29 billion in 2024 to \$5.18 billion in 2025, at a compound annual growth rate (CAGR) of 20.7%. The historic period growth is due to the escalating usage of DNA synthesis in scholarly genomic research, the rising incorporation of DNA synthesis into agricultural biotechnology, a surge in demand for fundamental DNA libraries for gene function investigations, the increasing use of artificial genes in the development of vaccines, and its growing application in modeling infectious diseases.



Get 30% Off All Global Market Reports With Code ONLINE30 – Stay Ahead Of Trade Shifts, Macroeconomic Trends, And Industry Disruptors”

The Business Research Company

In the coming years, the DNA synthesis market is projected to experience significant growth, scaling up to \$10.87

billion by 2029 with a compound annual growth rate (CAGR) of 20.4%. Various factors are contributing to this anticipated growth, including the increasing use of AI and automation in DNA synthesis procedures, more partnerships between biotech companies and academic institutions, advancements in DNA-based data storage technologies, a stronger emphasis on environment-friendly synthetic biology, and more supportive government initiatives toward genomic innovation. Key trends expected in the forecasting period involve progress in enzymatic DNA synthesis methods, enhanced incorporation of cloud-based bioinformatics in synthesis processes, evolution of decentralized DNA synthesis platforms, advancements in error-correction methods for synthetic genes, and progression in portable and urgent DNA synthesis devices.

Download a free sample of the dna synthesis market report:

<https://www.thebusinessresearchcompany.com/sample.aspx?id=25756&type=smp>

What Are The Key Driving Factors For The Growth Of The DNA Synthesis Market?

The growth of the DNA synthesis market is projected to surge due to the rising demand for personalized medicine. Personalized medicine employs a tailored approach to treatment and prevention by taking into account a person's genetic makeup, lifestyle, and environment to ensure the most beneficial therapeutic results. The escalating interest in this form of medicine is a result of progressive genomic technologies, which make it possible to create treatments adjusted to an individual's genetic structure. Such technologies not only enhance the efficacy of treatments but also lessen the side effects. Personalized medicine is further supported by DNA synthesis, allowing the creation of bespoke DNA sequences that can be used in gene editing, diagnostic methods, and precision medicines. Consequently, more precise and efficient healthcare solutions can be created specifically for individuals. As an illustration, in 2023, the FDA approved 16 new personalized treatments for patients with rare diseases, as reported by the Personalized Medicine Coalition, a US-based advocacy company. This was a marked increase from the six approved in the previous year, 2022. Thus, the growing demand for personalized medicine is fuelling the progress of the DNA synthesis market.

Which Companies Are Currently Leading In The DNA Synthesis Market?

Major players in the DNA Synthesis Global Market Report 2025 include:

- Thermo Fisher Scientific Inc.
- Eurofins Scientific
- GenScript Biotech Corporation
- Twist Bioscience Corporation
- Bioneer Corporation
- DNA Script
- Eton Bioscience
- LGC Biosearch Technologies
- Ansa Biotechnologies
- Synbio Technologies

What Are The Main Trends, Positively Impacting The Growth Of DNA Synthesis Market?

Prominent players in the DNA synthesis market are currently concentrating on the creation of cutting-edge solutions like synthetic deoxyribonucleic acid molecules. The aim is to expedite and render inexpensive and precise development of gene therapies, diagnostics, and synthetic biology applications. Synthetic DNA molecules are human-made nucleotide sequences, engineered in laboratories so as to either imitate or alter natural deoxyribonucleic acid for applications in research, diagnostics, biotechnology. To illustrate, Ribbon Biolabs, a synthetic

biology firm rooted in Austria, introduced MiroSynth, a new category of complex synthetic DNA molecules, in May 2025. This class is aimed to facilitate the high-throughput, automated, and scalable manufacture of lengthy and intricate deoxyribonucleic acid sequences for sophisticated biotechnological applications. It brings with it unique properties such as improved sequence assembly precision, increased strand length potential, and swiftness in creating complex genetic constructs, making it perfect for research, treatment development, and industrial biotech. The versatility of its design enables it to be integrated into various workflows, enabling both researchers and developers to expedite progress in genetics, synthetic biology, and bespoke medication.

How Is The DNA Synthesis Market Segmented?

The dna synthesis market covered in this report is segmented –

- 1) By Service: Oligonucleotide Synthesis, Standard Oligonucleotide Synthesis, Custom Oligonucleotide Synthesis, Gene Synthesis, Custom Gene Synthesis, Gene Library Synthesis
- 2) By Method: Solid-Phase Synthesis, PCR-Based Enzyme Synthesis, Chip-Based Synthesis
- 3) By Application: Research And Development, Diagnostics, Therapeutics, Synthetic Biology, Other Applications
- 4) By End-User: Pharmaceutical And Biotechnology Companies, Contract Research Organizations (CROs) And Contract Development And Manufacturing Organizations(CDMOs), Academic And Research Institutes, Other End-Users

Subsegments:

- 1) By Oligonucleotide Synthesis: DNA Oligonucleotides, RNA Oligonucleotides, Modified Oligonucleotides
- 2) By Standard Oligonucleotide Synthesis: Unmodified Oligonucleotides, Modified Oligonucleotides, Purity Grades
- 3) By Custom Oligonucleotide Synthesis: Custom Length Oligos, Custom Modifications, Custom Purity Specifications
- 4) By Gene Synthesis: Synthetic Genes, Codon-Optimized Genes, Functional Genes
- 5) By Custom Gene Synthesis: Custom Sequence Design, Multi-fragment Assembly, Vector Cloning Services
- 6) By Gene Library Synthesis: Random Mutagenesis Libraries, Site-Directed Mutagenesis Libraries, Combinatorial Libraries

View the full dna synthesis market report:

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

Which Is The Dominating Region For The DNA Synthesis Market?

In the DNA Synthesis Global Market Report 2025, North America was recorded as the dominant region for the year 2024. It is anticipated that the Asia-Pacific will display the most rapid growth

during the forecasted period. The report encompasses multiple regions including Asia-Pacific, Western Europe, Eastern Europe, North America, South America, Middle East, and Africa.

Browse Through More Reports Similar to the Global DNA Synthesis Market 2025, By [The Business Research Company](#)

Gene Synthesis Global Market Report 2025

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

Recombinant Dna Technology Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/recombinant-dna-technology-global-market-report>

Messenger Ribonucleic Acid Mrna Synthesis Raw Materials Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/messenger-ribonucleic-acid-mrna-synthesis-raw-materials-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/841395187>

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.