

Gene Synthesis: Technologies and Global Markets

Market Research Report | 2024-05-08 | 91 pages | BCC Research

AVAILABLE LICENSES:

- Single User License \$5500.00
- 2-5 Users License \$6600.00
- Site License \$7920.00
- Enterprise License \$9504.00

Report description:

Description

Report Scope

This report explores critical trends in the gene synthesis market, including the market drivers and restraints, R&D spending, increasing competition, new technologies, product launches and therapeutic applications. Merger and acquisition (M&A) activity and partnerships between companies are also discussed. In this report, the global market for gene synthesis is segmented by method, services, application, end user and region. Companies considering expanding their geographic reach will find the coverage of the regional markets helpful.

Report Includes

- 26 data tables and 32 additional tables
- An analysis of the global markets for gene synthesis
- A discussion of the global market trends, with current and historical market revenue (sales figures) for 2021-2022, estimates for 2023, forecasts for 2024, and projections of compound annual growth rates (CAGRs) through 2028
- An evaluation of the market size and revenue forecast for the global gene synthesis market, and corresponding market share analysis by method, services, application, end user and region
- A look at the drivers and challenges that affect the global market
- An analysis of the emerging technologies and new developments in the gene synthesis market
- A discussion of ESG developments, including consumer attitudes, impact of ESG on company performance, analysis of companies' ESG scores and the future of ESG, and ESG practices of leading companies
- An analysis of the vendor landscape, including the company market shares, recent M&A activity and the outlook for venture funding
- Company profiles of major players within the industry, including GenScript, Eurofins Scientific, Thermo Fisher Scientific Inc., Merck KGaA, and Azenta US Inc.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Executive Summary

Summary:

The global market for Gene Synthesis is estimated to increase from \$2.0 billion in 2023 to reach \$4.1 billion by 2028, at a compound annual growth rate (CAGR) of 15.8% from 2023 through 2028.

Table of Contents:

Table of Contents

Chapter 1 Executive Summary

Market Outlook

Scope of Report

Market Summary

Chapter 2 Market Overview

Overview of Gene Synthesis

Gene Synthesis Methods

Gene Synthesis Applications

Scientific Advances in Gene Synthesis

Technological Innovation in Gene Synthesis

Ethical Considerations in Gene Synthesis

Societal Implications

Chapter 3 Market Dynamics

Overview

Market Drivers

Biopharmaceutical R&D

Diagnostic and Therapeutic Applications

Advances in Agrobiotechnology

DNA Data Storage and Synthetic Genomics

Advances and Cost Reductions in Technology

Rising Investments in R&D

Opportunities in Personalized Medicine

Restraints

Cost Constraints

Lack of Quality Control and Standardization

Opportunities

Personalized Medicine and Precision Healthcare

AI in Gene Synthesis

Challenges

Intellectual Property Issues

Long Turnaround Times

Chapter 4 Regulatory Landscape

Biosecurity and Dual-use Concerns

Export Controls and Trade Regulations

Intellectual Property Rights

Regulatory Oversight of Clinical Applications

Ethical and Societal Considerations

Quality Assurance and Product Standards

Regulatory Challenges by Country

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

United States
Canada
Europe
Japan
India
Brazil
Chapter 5 Emerging Technologies and Developments
Enzymatic DNA Synthesis
Microfluidic DNA Synthesis
Machine Learning and AI
Thermodynamically Balanced Inside-out
Ligase-based Gene Synthesis
Polymerase-based Gene Synthesis
Patent Analysis
Chapter 6 Market Segmentation Analysis
Segmentation Breakdown
Gene Synthesis: Global Market
Global Market for Gene Synthesis, by Method
Solid-phase Synthesis
PCR-based Enzyme Synthesis
Chip-based Synthesis
Global Market for Gene Synthesis, by Services
Antibody DNA Synthesis
Viral DNA Synthesis
Other Gene Synthesis Services
Gene Synthesis: Global Markets, by Application
Gene and Cell Therapy Development
Vaccine Development
Disease Diagnosis
Other Applications
Global Market for Gene Synthesis, by End User
Academic and Government Research Institutes
Biotechnology and Pharmaceutical Companies
Contract Research Organizations
Geographic Breakdown
In-house or Outsource?
Cost Considerations
Quality Control and Assurance
Convenience and Turnaround Time
Customization and Specialization
Strategic Considerations
Chapter 7 Competitive Landscape
Company Rankings
M&A and Venture Funding
In Summation
Chapter 8 Appendix
Methodology

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Sources

Abbreviations

Company Profiles

AZENTA US INC.

DANAHER CORP.

EUROFINS SCIENTIFIC

GENSCRIPT

MERCK KGAA

ORIGENE TECHNOLOGIES INC.

PROMAB BIOTECHNOLOGIES INC.

PROTEOGENIX

THERMO FISHER SCIENTIFIC INC.

TWIST BIOSCIENCE

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Gene Synthesis: Technologies and Global Markets

Market Research Report | 2024-05-08 | 91 pages | BCC Research

To place an Order with Scotts International:

- ☐ - Print this form
- ☐ - Complete the relevant blank fields and sign
- ☐ - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$5500.00
	2-5 Users License	\$6600.00
	Site License	\$7920.00
	Enterprise License	\$9504.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2025-06-25"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com



Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com
www.scotts-international.com