

2025 Protein Synthesis Research Review

Market Research Report | 2026-04-07 | 144 pages | BCC Research

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Report description:

Description

Report Scope

Protein synthesis is vital for all living organisms, enabling cells to produce the proteins they need to survive and function. It is a basic biological process that builds proteins in cells, which is essential for every cellular function. The key components of protein synthesis are deoxyribonucleic acid (DNA), ribonucleic acid (RNA), ribosomes, and amino acids.

The growing demand for protein therapeutics due to the increase in the prevalence of chronic diseases is a major factor driving this market. Advances in cell-free systems and improved expression vectors, which enhance efficiency and productivity, also help to boost the protein synthesis market. The developments toward cell-free systems, high-throughput technologies, and a focus on personalized medicine also act as key factors for the growth of the protein synthesis market. The high production costs and complex techniques also affect this market's growth.

The market includes major companies such as Novartis, Jazz Pharmaceuticals, Amgen Inc., Novonosis, DSM- Firmenich, Thermo Fisher Scientific Inc, Lonza, Merck KGaA, Agilent Technologies, Cytiva, Illumina Inc, Bio Rad Laboratories Inc, Agilent Technologies Inc, Pfizer Inc., Genentech, USA Inc., and Eli Lilly, which mainly focus on protein therapeutics. The companies focusing on protein synthesis research and development include GenScript ProBio, Aldevron, Creative Biogene, and Tierra Biosciences Inc.

Research Reviews from BCC Research provide market professionals with concise market coverage within a specific research category. This 2025 Research Review of protein synthesis provides a sampling of the type of quantitative market information, analysis, and guidance that BCC Research has been developing since its inception in 1971 to help its customers make informed business decisions. This Research Review includes highlights and excerpts from the following reports published by BCC Research in 2025:

- BIO030M Global Markets for Enzymes in Industrial Applications
- BIO220C Oligonucleotides: Global Markets
- BIO165B Protein Expression: Global Markets
- BIO208D Cell and Gene Therapy Tools and Reagents: Global Markets

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- BIO061G Biomarkers: Technologies and Global Markets

After you survey the excerpts in this Research Review, we encourage you to follow up on these topics by checking out the full market research reports associated with each topic. BCC Research looks forward to serving your market intelligence needs in future.

Executive Summary

Summary:

The global market for enzymes in industrial applications was valued at \$7.9 billion in 2024 and is expected to reach \$10.8 billion by the end of 2029, at a compound annual growth rate (CAGR) of 6.5% from 2024 through 2029.

The global oligonucleotides market was valued at \$8.2 billion in 2024. It's expected to grow from \$9.1 billion in 2025 to reach \$15.7 billion by the end of 2030, at a compound annual growth rate (CAGR) of 11.5% from 2025 to 2030.

The global market for protein expression was valued at \$4.3 billion in 2024. It's expected to grow from \$4.7 billion in 2025 to reach \$7.9 billion by the end of 2030, at a compound annual growth rate (CAGR) of 10.9% from 2025 to 2030.

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