



CircRNA Synthesis Market Trends and Analysis: Comprehensive Overview

The global [circRNA synthesis market](#) size is anticipated to reach USD 442.5 million by 2030 and grow at a CAGR of 15.88% from 2025 to 2030 during the forecast period, according to a new report by Grand View Research, Inc. The circRNA synthesis industry is experiencing significant growth, driven by ongoing research and development efforts that highlight the therapeutic potential of circular RNAs. A recent comprehensive review published in Nature Reviews Genetics by Circio scientists underscores the unique properties of circRNAs, such as enhanced stability and superior immunological profiles, which make them promising candidates for various therapeutic applications, including infectious diseases, CAR-T therapy, and gene therapy. This publication not only emphasizes the current advancements in circRNA therapeutics but also identifies opportunities and challenges in the field, thereby encouraging further investment and exploration.

Strategic collaborations between companies are also propelling the market forward. For instance, in January 2024, Circio has partnered with 4basebio to develop and test synthetic circVec DNA vectors for genetic medicine and vaccines. This partnership aims to combine Circio's circVec circular RNA expression system with 4basebio's proprietary synthetic DNA formats and unique nanoparticle delivery platform, Hermes, to create a powerful therapeutic combination. Such alliances are instrumental in advancing the development of durable, repeat-dosable, non-viral platforms for future synthetic DNA gene therapies.

Innovations in circRNA production technologies are further driving market expansion. For instance, in August 2024, Abogen Biosciences, has announced the development of a highly efficient RNA circularization cis-splicing system, referred to as the Cis-System, which enables the production of circular RNA. This proprietary system not only holds global intellectual property rights but also offers improvements over existing methods, potentially enhancing the efficiency and scalability of circRNA production. Such technological advancements are crucial for the broader application of circRNA in therapeutics and vaccines, thereby fueling market growth.

**For More Details or Sample Copy please visit link @:[CircRNA Synthesis Market Report](#)
CircRNA Synthesis Market Report Highlights**

- The reagents and kits segment captured the largest revenue share of 47.29% in 2024. The increasing adoption of circRNA technologies in research and therapeutic development. Researchers require high-quality reagents and kits for efficient

circularization processes, vector construction, and purification to produce stable and functional circRNAs.

- In 2024, therapeutics development dominated the market with the largest revenue share, driven by the advancements in delivery systems, such as lipid nanoparticles (LNPs) tailored for circRNA, are enabling efficient and precise therapeutic applications. The rising number of preclinical and clinical studies focused on circRNA therapeutics underscores the market's potential to transform modern medicine.
- By end use, the pharmaceutical and biotechnology companies segment captured the largest revenue share of 59.55% in 2024. The market is driving growth in the circRNA synthesis industry by leveraging its potential for innovative therapies and vaccines.
- The North American region dominated the market share of 45.12% in 2024. The market is driven by robust investments in RNA-based research, a strong presence of biotech and pharmaceutical companies, and growing interest in RNA therapeutics and vaccines. Government funding, such as NIH grants, and academic collaborations further support advancements in the field. Additionally, the region's established infrastructure for clinical trials and cutting-edge technologies accelerates the adoption of circRNA platforms.

CircRNA Synthesis Market Segmentation

For this report, Grand View Research has segmented the global circRNA synthesis market report based on product & services, application, end use, and region:

CircRNA Synthesis Product & Services Outlook (Revenue, USD Million, 2018 - 2030)

- Reagents & Kits
- Instruments
- Services

CircRNA Synthesis Application Outlook (Revenue, USD Million, 2018 - 2030)

- Therapeutics Development
- Drug Discovery
- Other Applications

CircRNA Synthesis End Use Outlook (Revenue, USD Million, 2018- 2030)

- Pharmaceutical & Biotechnology Companies
- Academic & Research Institutes
- Others

Research Methodology

We employ a comprehensive and iterative research methodology focused on minimizing deviance in order to provide the most accurate estimates and forecasts possible. We utilize a

combination of bottom-up and top-down approaches for segmenting and estimating quantitative aspects of the market. Data is continuously filtered to ensure that only validated and authenticated sources are considered. In addition, data is also mined from a host of reports in our repository, as well as a number of reputed paid databases. Our market estimates and forecasts are derived through simulation models. A unique model is created and customized for each study. Gathered information for market dynamics, technology landscape, application development, and pricing trends are fed into the model and analyzed simultaneously.

About Grand View Research

Grand View Research provides syndicated as well as customized research reports and consulting services on 46 industries across 25 major countries worldwide. This U.S. based market research and consulting company is registered in California and headquartered in San Francisco. Comprising over 425 analysts and consultants, the company adds 1200+ market research reports to its extensive database each year. Supported by an interactive market intelligence platform, the team at Grand View Research guides Fortune 500 companies and prominent academic institutes in comprehending the global and regional business environment and carefully identifying future opportunities.

#CircRNA #RNATherapeutics #BiotechInnovation #SyntheticBiology #GeneTherapy
#MolecularBiology #RNAResearch #CircularRNA #BiotechMarket