

South & Central America Enzymatic DNA Synthesis Market Forecast to 2028 – COVID-19 Impact and Regional Analysis – by Product Type (Custom DNA Synthesis and DNA Library Synthesis), Application (Synthetic Biology, Genetic Engineering, Therapeutic Antibodies, Vaccine Design, and Others), and End User (Academic & Research Institutes, Biotech & Pharmaceutical Companies, Diagnostic Laboratories, and Others)

https://marketpublishers.com/r/S8DFF057F488EN.html

Date: April 2023 Pages: 112 Price: US\$ 3,000.00 (Single User License) ID: S8DFF057F488EN

# **Abstracts**

The South & Central America enzymatic DNA synthesis market is expected to grow from US\$ 13.04 million in 2022 to US\$ 112.02 million by 2028. It is estimated to register a CAGR of 43.1% from 2022 to 2028.

Growing Demand for Personalized Medicine and DNA Data Storage Drives South & Central America Enzymatic DNA Synthesis Market

Personalized medicine means improving healthcare by incorporating early disease detection, preventive medicine, rational drug discovery and development, and therapy monitoring. The genetic profile of a patient assists doctors in precisely calculating a patient's susceptibility to specific diseases and allows them to prescribe the patient a proper medication with reduced side effects. The bottom-up synthetic biology approach is considered more relevant for developing personalized medicine as it offers more flexibility in building a semi-synthetic cell from molecular building blocks for a desired application. Enzymatic DNA synthesis is expected to make a significant contribution to personalized medicine. It can be used to explore any possible mutations or gene



variants affecting a patient's response to a particular drug/treatment by analyzing the patient's genome sequencing or microarray gene expression. Moreover, enzymatic DNA synthesis may furnish better conclusions in the prior identification of infection. Therefore, personalized medicine, especially for treating rare diseases and genetic disorders, is expected to bring new trends in The South America enzymatic DNA synthesis market. New storage technologies are required to keep up with the global needs of data generation. Genetic code is millions of times more efficient at storing data than existing solutions, which are expensive and consume immense amounts of power and space. DNA as a high-density data storage medium can drive breakthroughs in next-generation biosensing and bio-recording technology, and digital storage. DNA data storage is experiencing incredible growth with even non-bio giants, such as Microsoft, entering the space. Enzymatic synthesis of DNA is considered to be a promising option. Enzymatic systems synthesize DNA that records rapidly changing environmental signals directly into DNA sequences, a method that could change how scientists study and record neurons in the brain. Thus, growing efforts to harness multiplex enzymatic oligonucleotide synthesis in the context of important applications such as digital data storage will usher in a new era of scientific research and biotechnology.

#### South & Central America Enzymatic DNA Synthesis Market Overview

Brazil is one of the largest countries in the world, with an estimated population of 212 million as of July 2020. In Brazil, the rare disease is diagnosed and treated at specialized centers of medical genetics services at university hospitals (UH) and Newborn Screening Reference Services (NSRS) for specific disorders. These centers provide rare disease diagnosis using clinical and mainly research laboratories. In addition, the Brazilian health system, the Unified Health System (SUS) plays a vital role in delivering access to high-cost therapies within the largest public healthcare system worldwide. Rare Disease Specialized Care Services and Rare Disease Reference Services (RDRS) were also established, and a list of genetic tests was incorporated into the SUS. In December 2019, DNA do Brasil (DNA of Brazil) was launched by a group of scientists from the University of S?o Paulo in partnership with diagnostic medicine company Dasa and the cloud computing platform Google Cloud. The project aims to trace the country's genetic roots through mass genetic sequencing. One of the project's main objectives was to build a genomic database of the Brazilian population that can help produce medicines and research of complex diseases. Additionally, in December 2020, an event was launched in partnership between ASGCT and the Brazilian Association of Cellular and Gene Therapy. The program's goal was to share experiences and insights on various factors to successfully initiate clinical trials of in



vivo and ex vivo gene therapies in Brazil. Therefore, various government initiatives and clinical research programs are important in expanding the availability and access to these therapies for patients, which, in turn, favor the growth of the enzymatic DNA synthesis market in the country.

South & Central America Enzymatic DNA Synthesis Market Revenue and Forecast to 2028 (US\$ Million)

South & Central America Enzymatic DNA Synthesis Market Segmentation

The South & Central America enzymatic DNA synthesis market is segmented on the basis of product type, application, end user, and country.

Based on product type, the South & Central America enzymatic DNA synthesis market is bifurcated into custom DNA synthesis and DNA library synthesis. In 2022, the DNA library synthesis segment registered a larger market share.

Based on application, the South & Central America enzymatic DNA synthesis market is segmented into synthetic biology, genetic engineering, therapeutic antibodies, vaccine design, and others. In 2022, the synthetic biology segment registered the largest market share.

Based on end user, the South & Central America enzymatic DNA synthesis market is segmented into academic & research institutes, biotech & pharmaceutical companies, diagnostic laboratories, and others. In 2022, the biotech & pharmaceutical companies segment held the largest market share.

Based on country, the South & Central America enzymatic DNA synthesis market is segmented into Brazil, Argentina, and the Rest of South & Central America. In 2022, Brazil registered a largest share in the South & Central America enzymatic DNA synthesis market.

DNA Script; GenScript Biotech Corporation; Synbio Technologies; Telesis Bio Inc; and Twist Bioscience are the leading companies operating in the South & Central America enzymatic DNA synthesis market.



# Contents

#### **1. INTRODUCTION**

- 1.1 Scope of the Study
- 1.2 The Insight Partners Research Report Guidance
- 1.3 Market Segmentation
- 1.3.1 South & Central America Enzymatic DNA Synthesis Market by Product Type
- 1.3.2 South & Central America Enzymatic DNA Synthesis Market by Application
- 1.3.3 South & Central America Enzymatic DNA Synthesis Market by End User
- 1.3.4 South & Central America Enzymatic DNA Synthesis Market by Country

## 2. SOUTH & CENTRAL AMERICA ENZYMATIC DNA SYNTHESIS MARKET – KEY TAKEAWAYS

#### 3. RESEARCH METHODOLOGY

- 3.1 Coverage
- 3.2 Secondary Research
- 3.3 Primary Research

## 4. SOUTH & CENTRAL AMERICA ENZYMATIC DNA SYNTHESIS MARKET – MARKET LANDSCAPE

4.1 Overview4.2 South & Central America PEST Analysis4.3 Expert's Opinion

## 5. SOUTH & CENTRAL AMERICA ENZYMATIC DNA SYNTHESIS MARKET – KEY MARKET DYNAMICS

- 5.1 Market Drivers
- 5.1.1 Rising Prevalence of Genetic Disorders
- 5.1.2 Surging Number of Product Launches
- 5.2 Market Restraints
- 5.2.1 High Costs and Complex Procedures
- 5.3 Market Opportunities
- 5.3.1 Growing Demand for Enzymatic DNA Synthesis Procedure

South & Central America Enzymatic DNA Synthesis Market Forecast to 2028 - COVID-19 Impact and Regional Analysi...



#### 5.4 Future Trends

5.4.1 Growing Demand for Personalized Medicine and DNA Data Storage

5.5 Impact Analysis

## 6. ENZYMATIC DNA SYNTHESIS MARKET – SOUTH & CENTRAL AMERICA ANALYSIS

6.1 South & Central America Enzymatic DNA Synthesis Market Revenue Forecast and Analysis

## 7. SOUTH & CENTRAL AMERICA ENZYMATIC DNA SYNTHESIS MARKET – REVENUE AND FORECAST TO 2028 – BY PRODUCT TYPE

7.1 Overview

7.2 South & Central America Enzymatic DNA Synthesis Market Revenue Share, by Product Type 2021 & 2028 (%)

7.3 Custom DNA Synthesis

7.3.1 Overview

7.3.2 Custom DNA Synthesis: South & Central America Enzymatic DNA Synthesis

Market - Revenue and Forecast to 2028 (US\$ Million)

7.4 DNA Library Synthesis

7.4.1 Overview

7.4.2 DNA Library Synthesis: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

## 8. SOUTH & CENTRAL AMERICA ENZYMATIC DNA SYNTHESIS MARKET ANALYSIS AND FORECASTS TO 2028 – BY APPLICATION

8.1 Overview

8.2 South & Central America Enzymatic DNA Synthesis Market, by Application 2021 & 2028 (%)

8.3 Synthetic Biology

8.3.1 Overview

8.3.2 Synthetic Biology: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

8.4 Genetic Engineering

8.4.1 Overview

8.4.2 Genetic Engineering: South & Central America Enzymatic DNA Synthesis Market

- Revenue and Forecast to 2028 (US\$ Million)

South & Central America Enzymatic DNA Synthesis Market Forecast to 2028 - COVID-19 Impact and Regional Analysi...



8.5 Therapeutic Antibodies

8.5.1 Overview

8.5.2 Therapeutic Antibodies: South & Central America Enzymatic DNA Synthesis

Market – Revenue and Forecast to 2028 (US\$ Million)

- 8.6 Vaccine Design
- 8.6.1 Overview

8.6.2 Vaccine Design: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

- 8.7 Others
- 8.7.1 Overview

8.7.2 Others: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

## 9. SOUTH & CENTRAL AMERICA ENZYMATIC DNA SYNTHESIS MARKET – REVENUE AND FORECAST TO 2028 – BY END USER

9.1 Overview

9.2 South & Central America Enzymatic DNA Synthesis Market Revenue Share, by End User 2021 & 2028 (%)

- 9.3 Academic and Research Institutes
- 9.3.1 Overview
- 9.3.2 Academic and Research Institutes: South & Central America Enzymatic DNA

Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

- 9.4 Biotech and Pharmaceutical Companies
- 9.4.1 Overview
- 9.4.2 Biotech and Pharmaceutical Companies: South & Central America Enzymatic

DNA Synthesis Market - Revenue and Forecast to 2028 (US\$ Million)

- 9.5 Diagnostic Laboratories
- 9.5.1 Overview

9.5.2 Diagnostic Laboratories: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

- 9.6 Others
- 9.6.1 Overview

9.6.2 Others: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

## 10. SOUTH & CENTRAL AMERICA ENZYMATIC DNA SYNTHESIS MARKET – REVENUE AND FORECAST TO 2028 – COUNTRY ANALYSIS



10.1 Overview

10.1.1 South & Central America: Enzymatic DNA Synthesis Market, by Country, 2021 & 2028 (%)

10.1.1.1 Brazil: Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

10.1.1.1.1 Overview

10.1.1.1.2 Brazil: Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

10.1.1.1.3 Brazil: Enzymatic DNA Synthesis Market, by Product Type, 2019–2028 (US\$ Million)

10.1.1.1.4 Brazil: Enzymatic DNA Synthesis Market, by Application, 2019–2028 (US\$ Million)

10.1.1.1.5 Brazil: Enzymatic DNA Synthesis Market, by End User, 2019–2028 (US\$ Million)

10.1.1.2 Argentina: Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

10.1.1.2.1 Overview

10.1.1.2.2 Argentina: Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

10.1.1.2.3 Argentina: Enzymatic DNA Synthesis Market, by Product Type, 2019–2028 (US\$ Million)

10.1.1.2.4 Argentina: Enzymatic DNA Synthesis Market, by Application, 2019–2028 (US\$ Million)

10.1.1.2.5 Argentina: Enzymatic DNA Synthesis Market, by End User, 2019–2028 (US\$ Million)

10.1.1.3 Rest of South & Central America: Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

10.1.1.3.1 Overview

10.1.1.3.2 Rest of South & Central America: Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

10.1.1.3.3 Rest of South & Central America: Enzymatic DNA Synthesis Market, by Product Type, 2019–2028 (US\$ Million)

10.1.1.3.4 Rest of South & Central America: Enzymatic DNA Synthesis Market, by Application, 2019–2028 (US\$ Million)

10.1.1.3.5 Rest of South & Central America: Enzymatic DNA Synthesis Market, by End User, 2019–2028 (US\$ Million)

## 11. SOUTH & CENTRAL AMERICA ENZYMATIC DNA SYNTHESIS MARKET – INDUSTRY LANDSCAPE

South & Central America Enzymatic DNA Synthesis Market Forecast to 2028 – COVID-19 Impact and Regional Analysi...



- 11.1 Overview
- 11.2 Organic Growth Strategies
- 11.2.1 Overview
- 11.3 Inorganic Growth Strategies
- 11.3.1 Overview

#### **12. COMPANY PROFILES**

- 12.1 Telesis Bio Inc
- 12.1.1 Key Facts
- 12.1.2 Business Description
- 12.1.3 Products and Services
- 12.1.4 Financial Overview
- 12.1.5 SWOT Analysis
- 12.1.6 Key Developments
- 12.2 GenScript Biotech Corporation
- 12.2.1 Key Facts
- 12.2.2 Business Description
- 12.2.3 Products and Services
- 12.2.4 Financial Overview
- 12.2.5 SWOT Analysis
- 12.2.6 Key Developments
- 12.3 DNA Script
- 12.3.1 Key Facts
- 12.3.2 Business Description
- 12.3.3 Products and Services
- 12.3.4 Financial Overview
- 12.3.5 SWOT Analysis
- 12.3.6 Key Developments
- 12.4 Synbio Technologies
- 12.4.1 Key Facts
- 12.4.2 Business Description
- 12.4.3 Products and Services
- 12.4.4 Financial Overview
- 12.4.5 SWOT Analysis
- 12.4.6 Key Developments
- 12.5 Twist Bioscience
- 12.5.1 Key Facts



- 12.5.2 Business Description
- 12.5.3 Products and Services
- 12.5.4 Financial Overview
- 12.5.5 SWOT Analysis
- 12.5.6 Key Developments

#### 13. APPENDIX

- 13.1 About The Insight Partners
- 13.2 Glossary of Terms



## **List Of Tables**

#### LIST OF TABLES

Table 1. South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

Table 2. Brazil Enzymatic DNA Synthesis Market, by Product Type – Revenue and Forecast to 2028 (US\$ Million)

Table 3. Brazil Enzymatic DNA Synthesis Market, by Application– Revenue and Forecast to 2028 (US\$ Million)

Table 4. Brazil Enzymatic DNA Synthesis Market, by End User – Revenue and Forecast to 2028 (US\$ Million)

Table 5. Argentina Enzymatic DNA Synthesis Market, by Product Type – Revenue and Forecast to 2028 (US\$ Million)

Table 6. Argentina Enzymatic DNA Synthesis Market, by Application– Revenue and Forecast to 2028 (US\$ Million)

Table 7. Argentina Enzymatic DNA Synthesis Market, by End User – Revenue and Forecast to 2028 (US\$ Million)

Table 8. Rest of South & Central America Enzymatic DNA Synthesis Market, by Product Type – Revenue and Forecast to 2028 (US\$ Million)

Table 9. Rest of South & Central America Enzymatic DNA Synthesis Market, by Application– Revenue and Forecast to 2028 (US\$ Million)

Table 10. Rest of South & Central America Enzymatic DNA Synthesis Market, by End User – Revenue and Forecast to 2028 (US\$ Million)

Table 11. Recent Organic Growth Strategies in Enzymatic DNA Synthesis Market

Table 12. Recent Inorganic Growth Strategies in The South & Central America enzymatic DNA synthesis market

Table 13. Glossary of Terms



# **List Of Figures**

#### LIST OF FIGURES

Figure 1. South & Central America Enzymatic DNA Synthesis Market Segmentation Figure 2. South & Central America Enzymatic DNA Synthesis Market, by Country Figure 3. South & Central America Enzymatic DNA Synthesis Market Overview Figure 4. DNA Library Synthesis Segment Held the Largest Share of Product Type Segment in the South & Central America Enzymatic DNA Synthesis Market Figure 5. Rest of South & Central America Expected to Show Remarkable Growth **During Forecast Period** Figure 6. South & Central America: PEST Analysis Figure 7. Experts' Opinion Figure 8. South & Central America Enzymatic DNA Synthesis Market: Impact Analysis of Drivers and Restraints Figure 9. South & Central America Enzymatic DNA Synthesis Market – Revenue Forecast and Analysis – 2020–2028 Figure 10. South & Central America Enzymatic DNA Synthesis Market Revenue Share, by Product Type 2021 & 2028 (%) Figure 11. Custom DNA Synthesis: Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million) Figure 12. DNA Library Synthesis: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million) Figure 13. South & Central America Enzymatic DNA Synthesis Market, by Application 2021 & 2028 (%) Figure 14. Synthetic Biology: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million) Figure 15. Genetic Engineering: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million) Figure 16. Therapeutic Antibodies: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million) Figure 17. Vaccine Design: South & Central America Enzymatic DNA Synthesis Market - Revenue and Forecast to 2028 (US\$ Million) Figure 18. Others: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million) Figure 19. South & Central America Enzymatic DNA Synthesis Market Revenue Share, by End User 2021 & 2028 (%) Figure 20. Academic and Research Institutes: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)



Figure 21. Biotech and Pharmaceutical Companies: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million) Figure 22. Diagnostic Laboratories: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million) Figure 23. Others: South & Central America Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million) Figure 24. South & Central America: Enzymatic DNA Synthesis Market, by Key Country – Revenue (2021) (US\$ Million) Figure 25. South & Central America: Enzymatic DNA Synthesis Market, by Country, 2021 & 2028 (%) Figure 26. Brazil: Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million) Figure 27. Argentina: Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)

Figure 28. Rest of South & Central America: Enzymatic DNA Synthesis Market – Revenue and Forecast to 2028 (US\$ Million)



#### I would like to order

Product name: South & Central America Enzymatic DNA Synthesis Market Forecast to 2028 – COVID-19 Impact and Regional Analysis – by Product Type (Custom DNA Synthesis and DNA Library Synthesis), Application (Synthetic Biology, Genetic Engineering, Therapeutic Antibodies, Vaccine Design, and Others), and End User (Academic & Research Institutes, Biotech & Pharmaceutical Companies, Diagnostic Laboratories, and Others)

Product link: https://marketpublishers.com/r/S8DFF057F488EN.html

Price: US\$ 3,000.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

#### Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/S8DFF057F488EN.html</u>

# To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

\*\*All fields are required

Custumer signature \_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>



To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970