

# U.S. DNA Synthesis Market Size, Share & Trends Analysis Report By Service Type (Gene Synthesis, Oligonucleotide Synthesis), By Application (Research Development, Diagnostics), By End Use, And Segment Forecasts, 2025 - 2033

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## Abstracts

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### U.S. DNA Synthesis Market Summary

The U.S. DNA synthesis market size was estimated at USD 1.25 billion in 2024 and is projected to reach USD 4.62 billion by 2033, expanding at a CAGR of 15.93% from 2025 to 2033. This high growth is driven by increasing demand in synthetic biology, personalized medicine, and biotechnology research. Advancements in gene editing technologies and declining costs of U.S. DNA synthesis are further accelerating market expansion. The U.S. remains a key player in global genomic innovation, supported by strong investment in R&D and a well-established biotech infrastructure.

### U.S. DNA Synthesis Market Report Segmentation

This report forecasts revenue growth and provides an analysis on the latest trends in each of the sub-segments from 2021 to 2033. For the purpose of this report, Grand View Research has segmented the U.S. DNA synthesis market on the basis of service type, application, and end use.

Service Type Outlook (Revenue, USD Million, 2021 - 2033)

Oligonucleotide Synthesis

### By Type

Standard Oligonucleotide Synthesis

Custom Oligonucleotide Synthesis

### By Length

Less than 50 nt

51-100 nt

101-150 nt

More than 150 nt

## Gene Synthesis

### By Type

Custom Gene Synthesis

Gene Library Synthesis

### By Length

Less than 500 nt

501-1000 nt

1001-1500 nt

1501-2000 nt

2001-2500 nt

More than 2500 nt

## Application Outlook (Revenue, USD Million, 2021 - 2033)

### Research and Development

Oligonucleotide Synthesis

PCR

NGS

CRISPR

Cloning and Mutagenesis

Others

Gene Synthesis

Synthetic Biology

Vaccine Development

Genetic Engineering

Others

### Diagnostics

### Therapeutics

RNAi Therapies

Antisense Oligonucleotide-based Therapies

Others

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Contract Research Organizations

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