+357 96 030922
info@marketpublishers.com

DNA Barcoding Services Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Type (Plant DNA Barcoding Services, Animal DNA Barcoding Services, Microbial DNA Barcoding Services), By Method (Sanger Sequencing, Short Read Sequencing, Long Read Sequencing), By Application (Pathogen Identification and Monitoring, Product Authentication and Quality Control, Biodiversity and Conservation Monitoring, Forensic and Legal Investigations, Others), By End Use (Pharmaceutical & Biotechnology Companies, Agriculture and Food Industry, Academic & Research Institutes, Others), By Region & Competition, 2021-2031F

https://marketpublishers.com/r/D4372D907246EN.html
Date: May 2026
Pages: 180
Price: US$ 4,500.00 (Single User License)
ID: D4372D907246EN

Abstracts

The Global DNA Barcoding Services Market is projected to expand significantly, rising from USD 197.11 Million in 2025 to USD 389.48 Million by 2031, demonstrating a compound annual growth rate (CAGR) of 12.02%. These services utilize the analysis of brief, standardized genetic markers to quickly identify species and facilitate taxonomic classification across academic, commercial, and regulatory domains. Key drivers for this market include the escalating demand for supply chain transparency, particularly for authenticating food products and herbal supplements, coupled with substantial global efforts in biodiversity monitoring. For instance, the Earth BioGenome Project initiated its

+357 96 030922
info@marketpublishers.com

second phase in 2025, aiming to sequence 150,000 eukaryote species, thereby requiring extensive sequencing and data analysis capabilities.

Despite this anticipated growth, the market encounters a notable hurdle: the insufficient comprehensiveness of public reference libraries. This limitation creates identification gaps for rare or regionally specific taxa, leading to ambiguous results or potential misidentifications. Such uncertainties can hinder the adoption of DNA barcoding within critical regulatory frameworks that demand absolute certainty for compliance and safety validation.

Market Driver

A primary impetus for the Global DNA Barcoding Services Market is the heightened emphasis on supply chain transparency and traceability solutions. Amid ongoing incidents of food fraud and mislabeling, both regulatory bodies and consumers are increasingly seeking robust verification of product authenticity, particularly within the seafood and herbal supplement industries. DNA barcoding offers the necessary genetic precision to validate species identity throughout intricate supply networks, ensuring adherence to safety standards and minimizing economic losses caused by adulteration. This shift is clearly reflected in the market's movement towards certified sustainable products requiring stringent auditing, as evidenced by an 8% increase in global sales volume of MSC-labelled products in the Marine Stewardship Council's 2024-25 Annual Report.

Concurrently, the expanding application of environmental DNA (eDNA) for ecological monitoring is transforming the market landscape. This non-invasive method facilitates the rapid detection of species in both aquatic and terrestrial environments, becoming crucial for large-scale conservation efforts, including biodiversity assessments and invasive species management. The commercial viability of this application is attracting significant industry investment; for instance, NatureMetrics secured $25 million in funding in January 2025 to scale its eDNA-based biodiversity monitoring technology. Furthermore, international financial backing for such biological inventories is broadening the market, with the Global Environment Facility making an additional $161.8 million available in July 2025 to assist developing nations in implementing biodiversity strategies, which is expected to considerably boost demand for genomic analysis.

Market Challenge

The limited comprehensiveness of public reference libraries represents a significant

+357 96 030922
info@marketpublishers.com

obstacle to the growth of the DNA barcoding services market. When these databases lack complete genetic profiles for uncommon or geographically specific taxa, service providers frequently struggle to provide conclusive species identification. This incompleteness can lead to uncertain outcomes or incorrect identifications, substantially eroding client confidence, especially among commercial entities that depend on absolute accuracy for quality control and regulatory adherence. As a result, sectors like agriculture and supply chain management may be reluctant to fully transition from conventional morphological identification methods to DNA-based solutions, perceiving the current technology as inadequate for comprehensive inventory verification.

These persistent data gaps impede the market's expansion into industries that necessitate absolute certainty for safety and legal compliance. The inability to precisely match sample DNA against a fully populated global inventory creates operational risks that hinder wider commercial adoption. Illustrating the scale of this deficiency, the International Barcode of Life reported in 2024 that the global reference database contained barcode records for approximately 1.5 million species, representing only a minor portion of the estimated biodiversity required for universal industrial application. This statistical reality highlights why an incomplete reference library remains a primary constraint on market revenue growth.

Market Trends

The commercial availability of portable and handheld DNA sequencing devices for field applications is fundamentally altering the market by enabling decentralized genetic analysis. These compact instruments allow researchers and border agents to conduct on-site species identification, bypassing traditional laboratory restrictions and significantly accelerating decision-making for critical biodiversity and regulatory matters. This mobility is proving particularly valuable for intercepting illegal wildlife trade and managing invasive species at entry points, where immediate verification is essential. The robust commercial scalability of this technology is evident in Oxford Nanopore Technologies' September 2024 report, showing ?84.1 million in revenue for the first half of the year, driven by strong demand in applied industrial markets adopting these flexible sequencing platforms for real-time biological monitoring.

Simultaneously, the increasing adoption of high-throughput Next-Generation Sequencing (NGS) for metabarcoding services is revolutionizing the industry's capacity to analyze complex biological mixtures with unparalleled detail. Unlike older methods that process individual specimens, NGS platforms facilitate the concurrent identification of thousands of taxa from bulk environmental samples—such as soil, water, or composite

+357 96 030922
info@marketpublishers.com

food products—thereby drastically reducing the cost per sequence. This technological advancement is crucial for industrial-scale applications requiring extensive auditing, including verifying the purity of processed supply chains or establishing large-scale ecosystem baselines. The financial investment underpinning this infrastructure is substantial, with Illumina reporting third-quarter revenue of $1.08 billion in November 2024, reflecting sustained investment in the high-throughput genomic capabilities that support these advanced metabarcoding workflows.

Key Market Players

Eurofins Scientific

CD Genomics

REPROCELL Group

Illumina, Inc.

PacBio Biosciences of California, Inc..

Oxford Nanopore Technologies Plc.

AllGenetics & Biology SL

1st BASE

Bento Bioworks Ltd

PT Genetika Science Indonesia

Report Scope

In this report, the Global DNA Barcoding Services Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

DNA Barcoding Services Market, By Type

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

United States

Canada

Mexico

Europe

France

United Kingdom

Italy

Germany

Spain

Asia Pacific

China

India

Japan

Australia

South Korea

South America

Brazil

Argentina

Colombia

+357 96 030922
info@marketpublishers.com

Middle East & Africa

South Africa

Saudi Arabia

UAE

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global DNA Barcoding Services Market.

Available Customizations:

Global DNA Barcoding Services Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

7. EUROPE DNA BARCODING SERVICES MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

8. ASIA PACIFIC DNA BARCODING SERVICES MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

9. MIDDLE EAST & AFRICA DNA BARCODING SERVICES MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

10. SOUTH AMERICA DNA BARCODING SERVICES MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: DNA Barcoding Services Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Type (Plant DNA Barcoding Services, Animal DNA Barcoding Services, Microbial DNA Barcoding Services), By Method (Sanger Sequencing, Short Read Sequencing, Long Read Sequencing), By Application (Pathogen Identification and Monitoring, Product Authentication and Quality Control, Biodiversity and Conservation Monitoring, Forensic and Legal Investigations, Others), By End Use (Pharmaceutical & Biotechnology Companies, Agriculture and Food Industry, Academic & Research Institutes, Others), By Region & Competition, 2021-2031F

Product link: https://marketpublishers.com/r/D4372D907246EN.html

Price: US$ 4,500.00 (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 https://marketpublishers.com/r/D4372D907246EN.html