

Next Generation Sequencing Sample Preparation Market Size, Share & Trends Analysis Report by Workflow (Automated Library Preparation), by Application, by End-Use, and Segment Forecasts, 2019 - 2025

https://marketpublishers.com/r/N765F1991D6AEN.html

Date: November 2019 Pages: 120 Price: US\$ 5,950.00 (Single User License) ID: N765F1991D6AEN

Abstracts

This report can be delivered to the clients within 48 Business Hours

The global next-generation sequencing (NGS) sample preparation market size is expected to reach USD 5.80 billion by 2025, expanding at a CAGR of 11.19% over the forecast period according to a new report by Grand View Research, Inc. Development of companion diagnostics and personalized medicine is expected to enhance the adoption of next-generation sequencing protocols in clinical practice. NGS technology is widely applicable in theranostics domain thus leading to growth in NGS sample preparation market.

In addition, an increase in sequencing capacity and speed has led to a rise in demand for high-throughput NGS sample handling solutions. Therefore, key players are focused on the development of automated platforms for sample preparation for next-generation sequencing.

For instance, the Bravo NGS manufactured by Agilent Technologies, Inc. efficiently automates library preparation for NGS implementation and reduces the overall time of the process. A laboratory technician can use Bravo NGS to prepare whole genome libraries for nearly 1,000 samples every week. The system also reduces variability by nearly 39% as compared to other manual methods.

Further Key Findings from the Report Suggest:



Semi-automated library preparation segment dominated the workflow segment in 2018 and is projected to remain on the top in terms of revenue generation in the coming years

Combination of automated and manual approaches for library preparation is attributed to the highest share of the segment

Market entities are engaged in strategic partnerships to develop library preparation protocols on semi-automated technologies

For instance, Illumina partnered with Hamilton Company for developing automated and semi-automated library preparation platform. The automation of preliminary steps aid in the reduction of sample handling time

Oncology was the largest and consumer genomics was the fastest-growing application segment from 2018 to 2025

Introduction of targeted gene panels for cancerous cells is expected to drive demand for efficient sample handling solutions in the coming years

Illumina is constantly working towards the development of next-generation sequencing based in vitro diagnostic (IVD) solutions for cancer diagnostics.

The company has partnered with some of the leading biotechnology firms to develop companion diagnostics targeting cancer

For instance, Illumina partnered with Loxo Oncology in April 2018 to develop NGS-based pan-cancer companion diagnostic solutions for solid tumors

Similarly, continuous introduction of novel solutions for consumer genomics is driving growth in the NGS sample preparation market

Companies such as 23andMe, Color Genomics, Helix, and Counsyl are active players in the consumer genomics segment

Clinical research segment is projected to grow with the highest CAGR in the coming years

Rising adoption of sequencing associated CLIA waived diagnostic tests among



these end-users is anticipated to boost growth

Although U.S. accounted for the largest share on the current market scenario, potential opportunities offered by emerging nations is attributive to the fastest growth rate of Asia Pacific region

China and India are expected to witness substantial penetration in the coming years with respect to implementation of biotechnological advances

Agilent Technologies.; BGI; Biomatters Ltd.; Bio-Rad Laboratories, Inc.; Congenica Ltd; DNASTAR; Eurofins Scientific; F. Hoffmann-La Roche Ltd; Foundation Medicine; Genomatix GmbH; Illumina; Macrogen; Myriad Genetics; Oxford Nanopore Technologies; Pacific Biosciences of California; Partek Incorporated; Perkin Elmer; PierianDx; QIAGEN; Quest Diagnostics Incorporated; and Thermo Fisher Scientific are the prominent participants operating in this market

These companies are working towards the development of novel products and workflows that can help ease the bottlenecks associated with the integration of sequencing in clinical medicine



Contents

CHAPTER 1 EXECUTIVE SUMMARY

1.1 Market Snapshot

CHAPTER 2 RESEARCH METHODOLOGY

- 2.1 Information Procurement
 - 2.1.1 Purchased database:
 - 2.1.2 GVR's Internal Database
 - 2.1.3 Secondary sources:
 - 2.1.4 Primary Research:
 - 2.1.5 Details of Primary Research
- 2.2 Information or Data Analysis
- 2.2.1 Data Analysis Models
- 2.3 Market Formulation & Validation
- 2.4 Model Details
- 2.4.1 Commodity flow analysis (Model 1)
 - 2.4.1.1 Approach 1: Commodity flow approach
- 2.5 List of Secondary Sources
- 2.6 List of Primary Sources
- 2.7 Objectives
 - 2.7.1 Objective
 - 2.7.2 Objective

CHAPTER 3 NGS SAMPLE PREPARATION MARKET VARIABLES, TRENDS & SCOPE

- 3.1 Market Segmentation & Scope
 - 3.1.1 Market driver analysis
 - 3.1.1.1 Automation in NGS sample preparation
 - 3.1.1.2 Declining cost of sequencing

3.1.1.3 Initiatives and funding from government & private bodies for large-scale sequencing projects

- 3.1.1.4 Improving reimbursement scenario for NGS-based diagnostic tests
- 3.1.1.5 Development of companion diagnostics and personalized medicine
- 3.1.2 Market restraint analysis
 - 3.1.2.1 Challenges associated with NGS sample preparation



3.1.2.2 Ethical issues

3.2 Penetration & Growth Prospect Mapping for Applications, 2018

3.3 NGS Sample Preparation -SWOT Analysis, By Factor (Political & Legal, Economic And Technological)

3.4 Industry Analysis – Porter's

CHAPTER 4 NGS SAMPLE PREPARATION MARKET CATEGORIZATION: WORKFLOW ESTIMATES & TREND ANALYSIS

4.1 NGS Sample Preparation Market: Workflow Movement Analysis, 2018 & 2025

- 4.2 NGS Library Preparation Kits
- 4.2.1 NGS library preparation kits market, 2014 2025 (USD Million)
- 4.3 Semi-automated Library Preparation
- 4.3.1 Semi-automated library preparation market, 2014 2025 (USD Million)
- 4.4 Automated Library Preparation
- 4.4.1 Automated library preparation market, 2014 2025 (USD Million)
- 4.5 Clonal Amplification
 - 4.5.1 Clonal amplification market, 2014 2025 (USD Million)

CHAPTER 5 NGS SAMPLE PREPARATION MARKET CATEGORIZATION: APPLICATION ESTIMATES & TREND ANALYSIS

5.1 NGS Sample Preparation Market: Application Movement Analysis, 2018 & 20255.2 Oncology

5.2.1 NGS sample preparation market for oncology, 2014 - 2025 (USD Million) 5.3 Clinical Investigation

5.3.1 NGS sample preparation market for clinical investigation, 2014 - 2025 (USD Million)

5.4 Reproductive Health

5.4.1 NGS sample preparation market for reproductive health, 2014 - 2025 (USD Million)

5.5 HLA Typing

5.5.1 NGS sample preparation market for HLA typing, 2014 - 2025 (USD Million) 5.6 Metagenomics, Epidemiology & Drug Development

5.6.1 NGS sample preparation market for metagenomics, epidemiology & drug development, 2014 - 2025 (USD Million)

5.7 Agrigenomics & Forensics

5.7.1 NGS sample preparation market for agrigenomics & forensics, 2014 - 2025 (USD Million)



5.8 Consumer Genomics

5.8.1 NGS sample preparation market for consumer genomics, 2014 - 2025 (USD Million)

CHAPTER 6 NGS SAMPLE PREPARATION MARKET CATEGORIZATION: END USE ESTIMATES & TREND ANALYSIS

6.1 NGS Sample Preparation Market: End Use Movement Analysis, 2018 & 20256.2 Academic Research

6.2.1 NGS sample preparation market for academic research, 2014 - 2025 (USD Million)

6.3 Clinical Research

6.3.1 NGS sample preparation market for clinical research, 2014 - 2025 (USD Million)6.4 Hospitals & Clinics

6.4.1 NGS sample preparation market for hospitals & clinics, 2014 - 2025 (USD Million)

6.5 Pharma & Biotech Entities

6.5.1 NGS sample preparation market for pharma & biotech entities, 2014 - 2025 (USD Million)

6.6 Other End Users

6.6.1 NGS sample preparation market for other end users, 2014 - 2025 (USD Million)

CHAPTER 7 NGS SAMPLE PREPARATION MARKET CATEGORIZATION: REGIONAL ESTIMATES & TREND ANALYSIS, BY WORKFLOW, APPLICATION, AND END USE

7.1 NGS Sample Preparation Market Share By Region, 2018 & 2025

7.2 North America

7.2.1 North America NGS sample preparation market, 2014 - 2025 (USD Million) 7.2.2 U.S.

7.2.2.1 U.S. NGS sample preparation market, 2014 - 2025 (USD Million) 7.2.3 Canada

7.2.3.1 Canada NGS sample preparation market, 2014 - 2025 (USD Million) 7.3 Europe

7.3.1 Europe NGS sample preparation market, 2014 - 2025 (USD Million)

7.3.2 Germany

7.3.2.1 Germany NGS sample preparation market, 2014 - 2025 (USD Million) 7.3.3 UK

7.3.3.1 UK NGS sample preparation market, 2014 - 2025 (USD Million)



7.4 Asia Pacific

7.4.1 Asia Pacific NGS sample preparation market, 2014 - 2025 (USD Million) 7.4.2 Japan

7.4.2.1 Japan NGS sample preparation market, 2014 - 2025 (USD Million) 7.4.3 China

7.4.3.1 China NGS sample preparation market, 2014 - 2025 (USD Million)

7.5 Latin America

7.5.1 Latin America NGS sample preparation market, 2014 - 2025 (USD Million)7.5.2 Brazil

7.5.2.1 Brazil NGS sample preparation market, 2014 - 2025 (USD Million) 7.6 MEA

7.6.1 MEA NGS sample preparation market, 2014 - 2025 (USD Million)

7.6.2 South Africa

7.6.2.1 South Africa NGS sample preparation market, 2014 - 2025 (USD Million)

CHAPTER 8 COMPETITIVE LANDSCAPE

- 8.1 Strategy Framework
- 8.2 Market Participation Categorization
- 8.3 Company Profiles
 - 8.3.1 Illumina, Inc.
 - 8.3.1.1 Company overview
 - 8.3.1.2 Financial performance
 - 8.3.1.3 Product benchmarking
 - 8.3.1.4 Strategic initiatives
 - 8.3.2 F. Hoffmann-La Roche Ltd.
 - 8.3.2.1 Company overview
 - 8.3.2.2 Financial performance
 - 8.3.2.3 Product benchmarking
 - 8.3.2.4 Strategic initiatives
- 8.3.3 Agilent Technologies, Inc.
 - 8.3.3.1 Company overview
 - 8.3.3.2 Financial performance
 - 8.3.3.3 Product benchmarking
 - 8.3.3.4 Strategic initiatives
- 8.3.4 PierianDx
 - 8.3.4.1 Company overview
 - 8.3.4.1.1 Tute Genomics
 - 8.3.4.1.2 Knome, Inc.



- 8.3.4.2 Financial performance
- 8.3.4.3 Product benchmarking
- 8.3.4.4 Strategic initiatives
- 8.3.5 Eurofins Scientific
 - 8.3.5.1 Company overview
 - 8.3.5.1.1 Eurofins GATC Biotech GmbH
- 8.3.5.2 Financial performance
- 8.3.5.2.1 Financial performance: Eurofins GATC Biotech GmbH
- 8.3.5.3 Product benchmarking
- 8.3.5.4 Strategic initiatives
- 8.3.6 Oxford Nanopore Technologies
- 8.3.6.1 Company overview
- 8.3.6.2 Financial performance
- 8.3.6.3 Product benchmarking
- 8.3.6.4 Strategic initiatives
- 8.3.7 Quest Diagnostics Incorporated
- 8.3.7.1 Company overview
- 8.3.7.2 Financial performance
- 8.3.7.3 Product benchmarking
- 8.3.7.4 Strategic initiatives
- 8.3.8 Foundation Medicine, Inc.
 - 8.3.8.1 Company overview
- 8.3.8.2 Financial performance
- 8.3.8.3 Product benchmarking
- 8.3.8.4 Strategic initiatives
- 8.3.9 Macrogen, Inc.
 - 8.3.9.1 Company overview
- 8.3.9.2 Financial performance
- 8.3.9.3 Product benchmarking
- 8.3.9.4 Strategic initiatives
- 8.3.10 Thermo Fisher Scientific, Inc.
 - 8.3.10.1 Company overview
 - 8.3.10.1.1 Life Technologies Corp.
- 8.3.10.2 Financial performance
- 8.3.10.3 Product benchmarking
- 8.3.10.4 Strategic initiatives
- 8.3.11 QIAGEN
 - 8.3.11.1 Company overview
 - 8.3.11.1.1 Ingenuity



- 8.3.11.1.2 CLC Bio
- 8.3.11.2 Financial performance
- 8.3.11.3 Product benchmarking
- 8.3.11.4 Strategic initiatives
- 8.3.12 BGI
- 8.3.12.1 Company overview
- 8.3.12.1.1 Complete Genomics Incorporated
- 8.3.12.2 Financial performance
- 8.3.12.3 Product benchmarking
- 8.3.12.4 Strategic initiatives
- 8.3.13 Perkin Elmer, Inc.
- 8.3.13.1 Company overview
- 8.3.13.2 Financial performance
- 8.3.13.3 Product benchmarking
- 8.3.13.4 Strategic initiatives
- 8.3.14 Pacific Biosciences of California, Inc.
 - 8.3.14.1 Company overview
 - 8.3.14.2 Financial performance
 - 8.3.14.3 Product benchmarking
- 8.3.14.4 Strategic initiatives
- 8.3.15 Bio-Rad Laboratories, Inc.
- 8.3.15.1 Company overview
- 8.3.15.2 GnuBio
- 8.3.15.2.1 Company overview
- 8.3.15.3 Financial performance
- 8.3.15.4 Product benchmarking
- 8.3.15.5 Strategic initiatives
- 8.3.16 Myriad Genetics, Inc.
- 8.3.16.1 Company overview
- 8.3.16.2 Financial performance
- 8.3.16.3 Product benchmarking
- 8.3.16.4 Strategic initiatives
- 8.3.17 LGC Limited
- 8.3.17.1 Company overview
- 8.3.17.2 SeraCare
- 8.3.17.2.1 Company overview
- 8.3.17.3 Financial performance (LGC Limited)
- 8.3.17.3.1 Financial performance
- 8.3.17.4 Product benchmarking



8.3.17.5 Strategic initiatives

- 8.3.18 Vela Diagnostics
- 8.3.18.1 Company overview
- 8.3.18.2 Financial performance
- 8.3.18.3 Product benchmarking
- 8.3.18.4 Strategic initiatives



List Of Tables

LIST OF TABLES

TABLE 1 List of secondary sources TABLE 2 Clonal amplification products in the market TABLE 3 North America NGS sample preparation market estimates & forecasts, by workflow, 2014 - 2025 (USD Million) TABLE 4 North America NGS sample preparation market estimates & forecasts, by application, 2014 - 2025 (USD Million) TABLE 5 North America NGS sample preparation market estimates & forecasts, by end use, 2014 - 2025 (USD Million) TABLE 6 U.S. NGS sample preparation market estimates & forecasts, by workflow, 2014 - 2025 (USD Million) TABLE 7 U.S. NGS sample preparation market estimates & forecasts, by application, 2014 - 2025 (USD Million) TABLE 8 U.S. NGS sample preparation market estimates & forecasts, by end use, 2014 - 2025 (USD Million) TABLE 9 Canada NGS sample preparation market estimates & forecasts, by workflow, 2014 - 2025 (USD Million) TABLE 10 Canada NGS sample preparation market estimates & forecasts, by application, 2014 - 2025 (USD Million) TABLE 11 Canada NGS sample preparation market estimates & forecasts, by end use, 2014 - 2025 (USD Million) TABLE 12 Europe NGS sample preparation market estimates & forecasts, by workflow, 2014 - 2025 (USD Million) TABLE 13 Europe NGS sample preparation market estimates & forecasts, by application, 2014 - 2025 (USD Million) TABLE 14 Europe NGS sample preparation market estimates & forecasts, by end use, 2014 - 2025 (USD Million) TABLE 15 Germany NGS sample preparation market estimates & forecasts, by workflow, 2014 - 2025 (USD Million) TABLE 16 Germany NGS sample preparation market estimates & forecasts, by application, 2014 - 2025 (USD Million) TABLE 17 Germany NGS sample preparation market estimates & forecasts, by end use, 2014 - 2025 (USD Million) TABLE 18 UK NGS sample preparation market estimates & forecasts, by workflow, 2014 - 2025 (USD Million) TABLE 19 UK NGS sample preparation market estimates & forecasts, by application,



2014 - 2025 (USD Million)

TABLE 20 UK NGS sample preparation market estimates & forecasts, by end use, 2014 - 2025 (USD Million)

TABLE 21 Asia Pacific NGS sample preparation market estimates & forecasts, by workflow, 2014 - 2025 (USD Million)

TABLE 22 Asia Pacific NGS sample preparation market estimates & forecasts, by application, 2014 - 2025 (USD Million)

TABLE 23 Asia Pacific NGS sample preparation market estimates & forecasts, by end use, 2014 - 2025 (USD Million)

TABLE 24 Japan NGS sample preparation market estimates & forecasts, by workflow, 2014 - 2025 (USD Million)

TABLE 25 Japan NGS sample preparation market estimates & forecasts, by application, 2014 - 2025 (USD Million)

TABLE 26 Japan NGS sample preparation market estimates & forecasts, by end use,2014 - 2025 (USD Million)

TABLE 27 China NGS sample preparation market estimates & forecasts, by workflow,2014 - 2025 (USD Million)

TABLE 28 China NGS sample preparation market estimates & forecasts, by application, 2014 - 2025 (USD Million)

TABLE 29 China NGS sample preparation market estimates & forecasts, by end use, 2014 - 2025 (USD Million)

TABLE 30 Latin America NGS sample preparation market estimates & forecasts, by workflow, 2014 - 2025 (USD Million)

TABLE 31 Latin America NGS sample preparation market estimates & forecasts, by application, 2014 - 2025 (USD Million)

TABLE 32 Latin America NGS sample preparation market estimates & forecasts, by end use, 2014 - 2025 (USD Million)

TABLE 33 Brazil NGS sample preparation market estimates & forecasts, by workflow, 2014 - 2025 (USD Million)

TABLE 34 Brazil NGS sample preparation market estimates & forecasts, by application, 2014 - 2025 (USD Million)

TABLE 35 Brazil NGS sample preparation market estimates & forecasts, by end use, 2014 - 2025 (USD Million)

TABLE 36 MEA NGS sample preparation market estimates & forecasts, by workflow, 2014 - 2025 (USD Million)

TABLE 37 MEA NGS sample preparation market estimates & forecasts, by application, 2014 - 2025 (USD Million)

TABLE 38 MEA NGS sample preparation market estimates & forecasts, by end use, 2014 - 2025 (USD Million)



TABLE 39 South Africa NGS sample preparation market estimates & forecasts, by workflow, 2014 - 2025 (USD Million)

TABLE 40 South Africa NGS sample preparation market estimates & forecasts, by application, 2014 - 2025 (USD Million)

TABLE 41 South Africa NGS sample preparation market estimates & forecasts, by end use, 2014 - 2025 (USD Million)



List Of Figures

LIST OF FIGURES

- FIG. 1 Market snapshot
- FIG. 2 Market research process
- FIG. 3 Data triangulation techniques
- FIG. 4 Primary research pattern
- FIG. 5 Market research approaches
- FIG. 6 Value chain based sizing & forecasting
- FIG. 7 QFD modelling for market share assessment
- FIG. 8 Market formulation & validation
- FIG. 9 Market trends & outlook
- FIG. 10 Market segmentation & scope
- FIG. 11 Market driver relevance analysis (Current & future impact)
- FIG. 12 Market restraint relevance analysis (Current & future impact)
- FIG. 13 Penetration & growth prospect mapping for applications, 2018
- FIG. 14 SWOT Analysis, By Factor (political & legal, economic and technological)
- FIG. 15 Porter's Five Forces Analysis
- FIG. 16 NGS sample preparation market: Workflow outlook key takeaways
- FIG. 17 NGS sample preparation market: Workflow movement analysis
- FIG. 18 NGS library preparation kits market, 2014 2025 (USD Million)
- FIG. 19 Semi-automated library preparation market, 2014 2025 (USD Million)
- FIG. 20 Automated library preparation market, 2014 2025 (USD Million)
- FIG. 21 Clonal amplification market, 2014 2025 (USD Million)
- FIG. 22 NGS sample preparation market: Application outlook key takeaways
- FIG. 23 NGS sample preparation market: Application movement analysis
- FIG. 24 NGS sample preparation market for oncology, 2014 2025 (USD Million)

FIG. 25 NGS sample preparation market for clinical investigation, 2014 - 2025 (USD Million)

FIG. 26 NGS sample preparation market for reproductive health, 2014 - 2025 (USD Million)

FIG. 27 NGS sample preparation market for HLA typing, 2014 - 2025 (USD Million) FIG. 28 NGS sample preparation market for metagenomics, epidemiology & drug development, 2014 - 2025 (USD Million)

FIG. 29 NGS sample preparation market for agrigenomics & forensics, 2014 - 2025 (USD Million)

FIG. 30 NGS sample preparation market for consumer genomics, 2014 - 2025 (USD Million)



FIG. 31 NGS sample preparation market: End use outlook key takeaways

FIG. 32 NGS sample preparation market: End use movement analysis

FIG. 33 NGS sample preparation market for academic research, 2014 - 2025 (USD Million)

FIG. 34 NGS sample preparation market for clinical research, 2014 - 2025 (USD Million)

FIG. 35 NGS sample preparation market for hospitals & clinics, 2014 - 2025 (USD Million)

FIG. 36 NGS sample preparation market for pharma & biotech entities, 2014 - 2025 (USD Million)

FIG. 37 NGS sample preparation market for other end users, 2014 - 2025 (USD Million)

- FIG. 38 Regional market place: Key takeaway
- FIG. 39 NGS sample preparation market regional outlook, 2018 & 2025
- FIG. 40 North America NGS sample preparation market, 2014 2025 (USD Million)
- FIG. 41 U.S. NGS sample preparation market, 2014 2025 (USD Million)
- FIG. 42 Canada NGS sample preparation market, 2014 2025 (USD Million)
- FIG. 43 Europe NGS sample preparation market, 2014 2025 (USD Million)

FIG. 44 Germany NGS sample preparation market, 2014 - 2025 (USD Million)

FIG. 45 UK NGS sample preparation market, 2014 - 2025 (USD Million)

FIG. 46 Asia Pacific NGS sample preparation market, 2014 - 2025 (USD Million)

FIG. 47 Japan NGS sample preparation market, 2014 - 2025 (USD Million)

FIG. 48 China NGS sample preparation market, 2014 - 2025 (USD Million)

- FIG. 49 Latin America NGS sample preparation market, 2014 2025 (USD Million)
- FIG. 50 Brazil NGS sample preparation market, 2014 2025 (USD Million)
- FIG. 51 MEA NGS sample preparation market, 2014 2025 (USD Million)
- FIG. 52 South Africa NGS sample preparation market, 2014 2025 (USD Million)
- FIG. 53 Strategy framework
- FIG. 54 Participant categorization



I would like to order

Product name: Next Generation Sequencing Sample Preparation Market Size, Share & Trends Analysis Report by Workflow (Automated Library Preparation), by Application, by End-Use, and Segment Forecasts, 2019 - 2025

Product link: https://marketpublishers.com/r/N765F1991D6AEN.html

Price: US\$ 5,950.00 (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/N765F1991D6AEN.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