

Cytogenetics Market By Product (Consumable, Instrument, Software and service), By Technique (Comparitive genome hybridization, Fluorescence in situ hybridization, Karyotyping, Others), By Application (Genetic disorder, Cancer, Personalized medicine, Others), By End User (Clinical and research laboratory, Pharmaceutical and biotechnology company, Academic Research Institute, Other): Global Opportunity Analysis and Industry Forecast, 2024-2035

<https://marketpublishers.com/r/CD17294B6C41EN.html>

Date: December 2024

Pages: 322

Price: US\$ 2,655.00 (Single User License)

ID: CD17294B6C41EN

Abstracts

The cytogenetics market was valued at \$2,809.40 million in 2023 and is estimated to reach \$10,627.05 million by 2035, exhibiting a CAGR of 11.7% from 2024 to 2035.

Cytogenetics is a branch of genetics focused on the study of chromosomes, the structures within cells that contain DNA. It involves analyzing the number, structure, and behavior of chromosomes to understand their role in heredity, disease, and biological function. Techniques in cytogenetics, such as karyotyping, fluorescence in situ hybridization (FISH), and comparative genomic hybridization (CGH), allow scientists to identify chromosomal abnormalities, such as deletions, duplications, translocations, and aneuploidies. These abnormalities are linked to various genetic disorders, cancers, and congenital conditions. By examining the chromosomal makeup of cells, cytogenetics plays a crucial role in prenatal diagnosis, cancer research, genetic counseling, and personalized medicine. The field bridges classical genetics with modern molecular biology, offering insights into how changes at the chromosomal level can affect an

individual's health and development, making it an essential tool in both clinical and research settings.

The major factors that drive the growth of cytogenetics market include the rise in prevalence of genetic disorders and cancer globally which fuels demand for cytogenetic testing and diagnostics. As genetic conditions such as Down syndrome, and various types of cancer become more prevalent, the need for accurate and early detection methods has grown significantly. Cytogenetic techniques, including karyotyping, fluorescence in situ hybridization (FISH), and chromosomal microarray analysis (CMA), are essential for identifying chromosomal abnormalities associated with these conditions, thereby driving market growth.

However, the high cost associated with cytogenetic technologies, including equipment, and specialized expertise can be prohibitive, particularly in low- and middle-income countries, limiting access to advanced diagnostic tools and limiting the market growth. In addition, the complexity of cytogenetic procedures requires skilled professionals and specialized training, which can be scarce in certain regions, further constraining market growth. On the other hand, increase in demand for personalized medicine, which relies heavily on advanced genetic testing to tailor treatments to individual patients' genetic profiles and high growth potential in emerging countries create an opportunity for market expansion.

Cytogenetics market is categorized into product, technique, application, end user, and region. On the basis of the product, it is segmented into consumable, instrument, and software & service. The consumables segment is further classified into testing kits and reagents, media, probes, and others. Media segment further includes serum media and others. On the basis of technique, the market is segmented into comparative genome hybridization, fluorescence in situ hybridization, karyotyping, and others. The karyotyping segment further categorized into prenatal testing, cancer, and others. Prenatal testing segment categorized into consumable, instrument, and software & services. Cancer segment further categorized into consumables which includes testing kits and reagents and media. Others segment also categorized into consumables which includes testing kits and reagents and media.

On the basis of application, it is segmented into genetic disorders, cancer, personalized medicine, and others. On the basis of end user, the market is classified into clinical and research laboratory, pharmaceutical and biotechnology company, academic research institute, and others. Region-wise, the market is studied across North America (U.S., Canada, and Mexico), Europe (Germany, France, UK, Italy, Spain, and Rest of Europe),

Asia-Pacific (Japan, China, India, Australia, South Korea, and Rest of Asia-Pacific), and LAMEA (Brazil, South Africa, Saudi Arabia, Rest of LAMEA).

The major companies profiled in the report include PAN-Biotech, Precipio, Inc., Applied Spectral Imaging, Capricorn Scientific, AddLife, and Thermo Fisher Scientific Inc. The key players operating in the market have adopted partnership, joint venture, collaboration, and agreement as their key strategy to expand their product portfolio. For instance, in January 2024, Barco and Applied Spectral Imaging (ASI), a world leader in advanced biomedical imaging with a comprehensive product portfolio for karyotyping, H&E, IHC and FISH imaging and analysis, announced a new commercial partnership to offer best-in-class digital solutions for pathology laboratories

Key Benefits for Stakeholders

This report provides a quantitative analysis of the market segments, current trends, estimations, and dynamics of the cytogenetics market analysis from 2023 to 2035 to identify the prevailing cytogenetics market opportunities.

The market research is offered along with information related to key drivers, restraints, and opportunities.

Porter's five forces analysis highlights the potency of buyers and suppliers to enable stakeholders make profit-oriented business decisions and strengthen their supplier-buyer network.

In-depth analysis of the cytogenetics market segmentation assists to determine the prevailing market opportunities.

Major countries in each region are mapped according to their revenue contribution to the global market.

Market player positioning facilitates benchmarking and provides a clear understanding of the present position of the market players.

The report includes the analysis of the regional as well as global cytogenetics market trends, key players, market segments, application areas, and market growth strategies.

Additional benefits you will get with this purchase are:

Quarterly Update and* (only available with a corporate license, on listed price)

5 additional Company Profile of client Choice pre- or Post-purchase, as a free update.

Free Upcoming Version on the Purchase of Five and Enterprise User License.

16 analyst hours of support* (post-purchase, if you find additional data requirements upon review of the report, you may receive support amounting to 16 analyst hours to solve questions, and post-sale queries)

15% Free Customization* (in case the scope or segment of the report does not match your requirements, 15% is equivalent to 3 working days of free work, applicable once)

Free data Pack on the Five and Enterprise User License. (Excel version of the report)

Free Updated report if the report is 6-12 months old or older.

24-hour priority response*

Free Industry updates and white papers.

Possible Customization with this report (with additional cost and timeline, please talk to the sales executive to know more)

Regulatory Guidelines

Additional company profiles with specific to client's interest

Expanded list for Company Profiles

Historic market data

Key Market Segments

By Product

Consumable

Type

Testing kits

Media

? Type

Probes

Others

Instrument

Software and service

By Technique

Comparative genome hybridization

Fluorescence in situ hybridization

Karyotyping

Type

Prenatal Testing

? Type

Cancer

? Consumables

Others

? Consumable

Others

By Application

Genetic disorder

Cancer

Personalized medicine

Others

By End User

Clinical and research laboratory

Type

Cancer Research

Clinical Diagnostics Labs

Others

Pharmaceutical and biotechnology company

Academic Research Institute

Other

By Region

North America

U.S.

Canada

Mexico

Europe

Germany

France

UK

Italy

Spain

Rest of Europe

Asia-Pacific

Japan

China

India

Australia

South Korea

Rest of Asia-Pacific

LAMEA

Brazil

South Africa,

Saudi Arabia

Rest of LAMEA

Key Market Players

AddLife

Applied Spectral Imaging

PAN-Biotech

Precipio, Inc.

Capricorn Scientific

Thermo Fisher Scientific Inc.

Contents

CHAPTER 1: INTRODUCTION

- 1.1. Report description
- 1.2. Key market segments
- 1.3. Key benefits to the stakeholders
- 1.4. Research methodology
 - 1.4.1. Primary research
 - 1.4.2. Secondary research
 - 1.4.3. Analyst tools and models

CHAPTER 2: EXECUTIVE SUMMARY

- 2.1. CXO perspective

CHAPTER 3: MARKET OVERVIEW

- 3.1. Market definition and scope
- 3.2. Key findings
 - 3.2.1. Top impacting factors
 - 3.2.2. Top investment pockets
- 3.3. Porter's five forces analysis
 - 3.3.1. Moderate bargaining power of suppliers
 - 3.3.2. Moderate threat of new entrants
 - 3.3.3. Moderate threat of substitutes
 - 3.3.4. Moderate intensity of rivalry
 - 3.3.5. Moderate bargaining power of buyers
- 3.4. Market dynamics
 - 3.4.1. Drivers
 - 3.4.1.1. Increase in prevalence of genetic disorders
 - 3.4.1.2. Increase in awareness and adoption of personalized medicine
 - 3.4.1.3. Advancement in technology
 - 3.4.2. Restraints
 - 3.4.2.1. High costs of equipment and procedures
 - 3.4.3. Opportunities
 - 3.4.3.1. Increase in focus on R&D
 - 3.4.3.2. High growth potential in emerging countries

CHAPTER 4: CYTOGENETICS MARKET, BY PRODUCT

4.1. Overview

4.1.1. Market size and forecast

4.2. Consumable

4.2.1. Key market trends, growth factors and opportunities

4.2.2. Market size and forecast, by region

4.2.3. Market share analysis by country

4.2.4. Consumable Cytogenetics Market by Type

4.2.4.1. Media Cytogenetics Market by Type

4.3. Instrument

4.3.1. Key market trends, growth factors and opportunities

4.3.2. Market size and forecast, by region

4.3.3. Market share analysis by country

4.4. Software and service

4.4.1. Key market trends, growth factors and opportunities

4.4.2. Market size and forecast, by region

4.4.3. Market share analysis by country

CHAPTER 5: CYTOGENETICS MARKET, BY TECHNIQUE

5.1. Overview

5.1.1. Market size and forecast

5.2. Comparative genome hybridization

5.2.1. Key market trends, growth factors and opportunities

5.2.2. Market size and forecast, by region

5.2.3. Market share analysis by country

5.3. Fluorescence in situ hybridization

5.3.1. Key market trends, growth factors and opportunities

5.3.2. Market size and forecast, by region

5.3.3. Market share analysis by country

5.4. Karyotyping

5.4.1. Key market trends, growth factors and opportunities

5.4.2. Market size and forecast, by region

5.4.3. Market share analysis by country

5.4.4. Karyotyping Cytogenetics Market by Type

5.4.4.1. Prenatal Testing Cytogenetics Market by Type

5.4.4.1.1. Consumables Cytogenetics Market by Type

5.4.4.2. Cancer Cytogenetics Market by Consumables

5.4.4.2.1. Media Cytogenetics Market by Type

5.4.4.3. Others Cytogenetics Market by Consumable

5.4.4.3.1. Media Cytogenetics Market by Type

5.5. Others

5.5.1. Key market trends, growth factors and opportunities

5.5.2. Market size and forecast, by region

5.5.3. Market share analysis by country

CHAPTER 6: CYTOGENETICS MARKET, BY APPLICATION

6.1. Overview

6.1.1. Market size and forecast

6.2. Genetic disorder

6.2.1. Key market trends, growth factors and opportunities

6.2.2. Market size and forecast, by region

6.2.3. Market share analysis by country

6.3. Cancer

6.3.1. Key market trends, growth factors and opportunities

6.3.2. Market size and forecast, by region

6.3.3. Market share analysis by country

6.4. Personalized medicine

6.4.1. Key market trends, growth factors and opportunities

6.4.2. Market size and forecast, by region

6.4.3. Market share analysis by country

6.5. Others

6.5.1. Key market trends, growth factors and opportunities

6.5.2. Market size and forecast, by region

6.5.3. Market share analysis by country

CHAPTER 7: CYTOGENETICS MARKET, BY END USER

7.1. Overview

7.1.1. Market size and forecast

7.2. Clinical and research laboratory

7.2.1. Key market trends, growth factors and opportunities

7.2.2. Market size and forecast, by region

7.2.3. Market share analysis by country

7.2.4. Clinical and research laboratory Cytogenetics Market by Type

7.3. Pharmaceutical and biotechnology company

- 7.3.1. Key market trends, growth factors and opportunities
- 7.3.2. Market size and forecast, by region
- 7.3.3. Market share analysis by country
- 7.4. Academic Research Institute
 - 7.4.1. Key market trends, growth factors and opportunities
 - 7.4.2. Market size and forecast, by region
 - 7.4.3. Market share analysis by country
- 7.5. Other
 - 7.5.1. Key market trends, growth factors and opportunities
 - 7.5.2. Market size and forecast, by region
 - 7.5.3. Market share analysis by country

CHAPTER 8: CYTOGENETICS MARKET, BY REGION

- 8.1. Overview
 - 8.1.1. Market size and forecast By Region
- 8.2. North America
 - 8.2.1. Key market trends, growth factors and opportunities
 - 8.2.2. Market size and forecast, by Product
 - 8.2.3. Market size and forecast, by Technique
 - 8.2.4. Market size and forecast, by Application
 - 8.2.5. Market size and forecast, by End User
 - 8.2.6. Market size and forecast, by country
 - 8.2.6.1. U.S.
 - 8.2.6.1.1. Market size and forecast, by Product
 - 8.2.6.1.2. Market size and forecast, by Technique
 - 8.2.6.1.3. Market size and forecast, by Application
 - 8.2.6.1.4. Market size and forecast, by End User
 - 8.2.6.2. Canada
 - 8.2.6.2.1. Market size and forecast, by Product
 - 8.2.6.2.2. Market size and forecast, by Technique
 - 8.2.6.2.3. Market size and forecast, by Application
 - 8.2.6.2.4. Market size and forecast, by End User
 - 8.2.6.3. Mexico
 - 8.2.6.3.1. Market size and forecast, by Product
 - 8.2.6.3.2. Market size and forecast, by Technique
 - 8.2.6.3.3. Market size and forecast, by Application
 - 8.2.6.3.4. Market size and forecast, by End User
- 8.3. Europe

8.3.1. Key market trends, growth factors and opportunities

8.3.2. Market size and forecast, by Product

8.3.3. Market size and forecast, by Technique

8.3.4. Market size and forecast, by Application

8.3.5. Market size and forecast, by End User

8.3.6. Market size and forecast, by country

8.3.6.1. Germany

8.3.6.1.1. Market size and forecast, by Product

8.3.6.1.2. Market size and forecast, by Technique

8.3.6.1.3. Market size and forecast, by Application

8.3.6.1.4. Market size and forecast, by End User

8.3.6.2. France

8.3.6.2.1. Market size and forecast, by Product

8.3.6.2.2. Market size and forecast, by Technique

8.3.6.2.3. Market size and forecast, by Application

8.3.6.2.4. Market size and forecast, by End User

8.3.6.3. UK

8.3.6.3.1. Market size and forecast, by Product

8.3.6.3.2. Market size and forecast, by Technique

8.3.6.3.3. Market size and forecast, by Application

8.3.6.3.4. Market size and forecast, by End User

8.3.6.4. Italy

8.3.6.4.1. Market size and forecast, by Product

8.3.6.4.2. Market size and forecast, by Technique

8.3.6.4.3. Market size and forecast, by Application

8.3.6.4.4. Market size and forecast, by End User

8.3.6.5. Spain

8.3.6.5.1. Market size and forecast, by Product

8.3.6.5.2. Market size and forecast, by Technique

8.3.6.5.3. Market size and forecast, by Application

8.3.6.5.4. Market size and forecast, by End User

8.3.6.6. Rest of Europe

8.3.6.6.1. Market size and forecast, by Product

8.3.6.6.2. Market size and forecast, by Technique

8.3.6.6.3. Market size and forecast, by Application

8.3.6.6.4. Market size and forecast, by End User

8.4. Asia-Pacific

8.4.1. Key market trends, growth factors and opportunities

8.4.2. Market size and forecast, by Product

8.4.3. Market size and forecast, by Technique

8.4.4. Market size and forecast, by Application

8.4.5. Market size and forecast, by End User

8.4.6. Market size and forecast, by country

8.4.6.1. Japan

8.4.6.1.1. Market size and forecast, by Product

8.4.6.1.2. Market size and forecast, by Technique

8.4.6.1.3. Market size and forecast, by Application

8.4.6.1.4. Market size and forecast, by End User

8.4.6.2. China

8.4.6.2.1. Market size and forecast, by Product

8.4.6.2.2. Market size and forecast, by Technique

8.4.6.2.3. Market size and forecast, by Application

8.4.6.2.4. Market size and forecast, by End User

8.4.6.3. India

8.4.6.3.1. Market size and forecast, by Product

8.4.6.3.2. Market size and forecast, by Technique

8.4.6.3.3. Market size and forecast, by Application

8.4.6.3.4. Market size and forecast, by End User

8.4.6.4. Australia

8.4.6.4.1. Market size and forecast, by Product

8.4.6.4.2. Market size and forecast, by Technique

8.4.6.4.3. Market size and forecast, by Application

8.4.6.4.4. Market size and forecast, by End User

8.4.6.5. South Korea

8.4.6.5.1. Market size and forecast, by Product

8.4.6.5.2. Market size and forecast, by Technique

8.4.6.5.3. Market size and forecast, by Application

8.4.6.5.4. Market size and forecast, by End User

8.4.6.6. Rest of Asia-Pacific

8.4.6.6.1. Market size and forecast, by Product

8.4.6.6.2. Market size and forecast, by Technique

8.4.6.6.3. Market size and forecast, by Application

8.4.6.6.4. Market size and forecast, by End User

8.5. LAMEA

8.5.1. Key market trends, growth factors and opportunities

8.5.2. Market size and forecast, by Product

8.5.3. Market size and forecast, by Technique

8.5.4. Market size and forecast, by Application

8.5.5. Market size and forecast, by End User

8.5.6. Market size and forecast, by country

8.5.6.1. Brazil

8.5.6.1.1. Market size and forecast, by Product

8.5.6.1.2. Market size and forecast, by Technique

8.5.6.1.3. Market size and forecast, by Application

8.5.6.1.4. Market size and forecast, by End User

8.5.6.2. South Africa,

8.5.6.2.1. Market size and forecast, by Product

8.5.6.2.2. Market size and forecast, by Technique

8.5.6.2.3. Market size and forecast, by Application

8.5.6.2.4. Market size and forecast, by End User

8.5.6.3. Saudi Arabia

8.5.6.3.1. Market size and forecast, by Product

8.5.6.3.2. Market size and forecast, by Technique

8.5.6.3.3. Market size and forecast, by Application

8.5.6.3.4. Market size and forecast, by End User

8.5.6.4. Rest of LAMEA

8.5.6.4.1. Market size and forecast, by Product

8.5.6.4.2. Market size and forecast, by Technique

8.5.6.4.3. Market size and forecast, by Application

8.5.6.4.4. Market size and forecast, by End User

CHAPTER 9: COMPETITIVE LANDSCAPE

9.1. Introduction

9.2. Top winning strategies

9.3. Product mapping of top 10 player

9.4. Competitive dashboard

9.5. Competitive heatmap

9.6. Top player positioning, 2023

CHAPTER 10: COMPANY PROFILES

10.1. PAN-Biotech

10.1.1. Company overview

10.1.2. Key executives

10.1.3. Company snapshot

10.1.4. Operating business segments

- 10.1.5. Product portfolio
- 10.2. Precipio, Inc.
 - 10.2.1. Company overview
 - 10.2.2. Key executives
 - 10.2.3. Company snapshot
 - 10.2.4. Operating business segments
 - 10.2.5. Product portfolio
 - 10.2.6. Business performance
 - 10.2.7. Key strategic moves and developments
- 10.3. Applied Spectral Imaging
 - 10.3.1. Company overview
 - 10.3.2. Key executives
 - 10.3.3. Company snapshot
 - 10.3.4. Operating business segments
 - 10.3.5. Product portfolio
 - 10.3.6. Key strategic moves and developments
- 10.4. Capricorn Scientific
 - 10.4.1. Company overview
 - 10.4.2. Key executives
 - 10.4.3. Company snapshot
 - 10.4.4. Operating business segments
 - 10.4.5. Product portfolio
- 10.5. Thermo Fisher Scientific Inc.
 - 10.5.1. Company overview
 - 10.5.2. Key executives
 - 10.5.3. Company snapshot
 - 10.5.4. Operating business segments
 - 10.5.5. Product portfolio
 - 10.5.6. Business performance
 - 10.5.7. Key strategic moves and developments
- 10.6. AddLife
 - 10.6.1. Company overview
 - 10.6.2. Key executives
 - 10.6.3. Company snapshot
 - 10.6.4. Operating business segments
 - 10.6.5. Product portfolio
 - 10.6.6. Business performance

I would like to order

Product name: Cytogenetics Market By Product (Consumable, Instrument, Software and service), By Technique (Comparative genome hybridization, Fluorescence in situ hybridization, Karyotyping, Others), By Application (Genetic disorder, Cancer, Personalized medicine, Others), By End User (Clinical and research laboratory, Pharmaceutical and biotechnology company, Academic Research Institute, Other): Global Opportunity Analysis and Industry Forecast, 2024-2035

Product link: <https://marketpublishers.com/r/CD17294B6C41EN.html>

Price: US\$ 2,655.00 (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/CD17294B6C41EN.html>