

**Genotyping Assay Market by Product & Services (Kits, Instruments, Bioinformatics), Technology (PCR, Sequencing, Microarray), Application (Pharmacogenomics, Animal Genetics), End User (PharmaBiotech Companies, Diagnostic Labs) - Global Forecast to 2029**

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**Report description:**

At a CAGR of 13.8% over the course of the projection period, the genotyping assay market is expected to grow from USD 19.4 billion in 2024 to USD 37.1 billion in 2029. Advances in technology and falling DNA sequencing costs are anticipated to propel this market's growth. Recently, the industry has grown at a slower rate due to the increased prevalence of hereditary illnesses. Additionally, the field of customized medicine and medication development has made genotyping a major component. Opportunities in the market are anticipated to arise from the need for genome analysis in plants and animal livestock, an increasing emphasis on national sequencing programs aimed at establishing genetic connections with disease, and the expanding fields of applications for genotyping. On the other hand, market expansion may be somewhat hampered by the high cost of equipment.

"Reagents & Kits segment accounted for the highest CAGR"

By product & service, the market is primarily segmented into reagents and kits, instruments, GENOTYPING ASSAY services, and bioinformatics. The reagents & kits segment accounted for the largest share of the Genotyping assay in 2023. The availability of a broad variety of reagents, the rising demand for reagents due to the rising volume of GENOTYPING ASSAY tests conducted worldwide, and the comparatively lower initial outlay needed to implement reagents and kits for GENOTYPING Assay in pharmacies and diagnostic facilities are all responsible for this segment's size.

"The polymerase chain reaction (PCR) segment accounted for the market share in the genotyping assay market, by technology, during the forecast period"

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By technology, the market is primarily segmented into polymerase chain reaction (PCR), microarrays, capillary electrophoresis, sequencing, matrix-assisted laser desorption ionization time-of-flight (MALDI-TOF), and other technologies (in situ hybridization and allele-specific oligonucleotides). The PCR segment accounted for the largest share of the GENOTYPING ASSAY technology market in 2023. The main factors propelling the growth of the PCR market are the introduction of new technologies like reverse transcriptase PCR, nested PCR, hot-start PCR, allele-specific PCR, and multiplex PCR; technological developments in PCR instruments and reagents; and the growing use of PCR technologies in the domains of genetics, prenatal testing, forensics, and personalized medicine.

"Pharmacogenomics segment accounted for the highest share"

By application, the market is primarily segmented into pharmacogenomics, diagnostics & personalized medicine, agricultural biotechnology, animal genetics, and other applications. The pharmacogenomics segment accounted for the largest share of the GENOTYPING ASSAY applications market in 2023. The primary drivers of growth in this market are the growing need for pharmacogenomics to investigate adverse drug reactions (ADRs) in clinical trials and the requirement to lower the total cost of medication development for pharmaceutical companies. The growing need for customized medication, the rise in hereditary and life-threatening illnesses, and ongoing research into effective and alternative drug delivery strategies are all anticipated to fuel the growth of the pharmacogenomics genotyping test.

"Biopharmaceutical & pharmaceutical companies segment accounted for the highest share"

By end user, the market is primarily segmented into biopharmaceutical & pharmaceutical companies, diagnostic laboratories, academic & research institutes, and other end users. The biopharmaceutical & pharmaceutical companies segment accounted for the largest share of the GENOTYPING ASSAY end-user market in 2023. The growing need for pharmacogenomics in the medication development process, the introduction of new products, and FDA recommendations to incorporate pharmacogenomics studies and GENOTYPING ASSAY in the drug discovery process are all responsible for this segment's size. Furthermore, the expansion of this market sector within GENOTYPING ASSAY is further facilitated by a rise in partnerships and funding for pharmacogenomics research.

"Asia Pacific: The fastest-growing region in cancer biomarkers market"

The global cancer biomarkers market is segmented into North America, Europe, the Asia Pacific, Latin America, the Middle East & Africa and GCC Countries. The Asia Pacific region is projected to register the highest CAGR during the forecast period, primarily due to the increasing financial support from public as well as private agencies, increasing number of NGS-based research projects, increasing awareness about precision medicine, and high incidence of chronic diseases.

Breakdown of supply-side primary interviews, by company type, designation, and region:

- By Company Type: Tier 1 (40%), Tier 2 (30%), and Tier 3 (30%)
- By Designation: C-level (27%), Director-level (18%), and Others (55%)
- By Region: North America (51%), Europe (21%), Asia- Pacific (18%), Latin America (6%), and Middle East & Africa(4%)

Lists of Companies Profiled in the Report:

- Thermo Fisher Scientific Inc. (US),
- Illumina, Inc. (US),
- Danaher Corporation (US),
- QIAGEN (Netherlands),
- Eurofins Scientific (Luxembourg),
- F. Hoffmann-La Roche Ltd. (Switzerland),
- Bio-Rad Laboratories, Inc. (US),
- Merck KGAA (Germany),
- Agilent Technologies (US),

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- Revvity Inc. (US),
- Standard Bio Tools (US),
- PacBio (US),
- GENEWIZ Inc. (US),
- Luminex Corporation (Diasorin Company) (US),
- Oxford Nanopore Technologies Plc (UK),
- GenScript (US),
- Takara Bio Inc. (Japan),
- New England Biolabs (US),
- Promega Corporation (US),
- Tecan Trading AG (Switzerland),
- Genotypic Technology Pvt. Ltd. (India),
- BGI GROUP (China),
- Novogene Co., Ltd. (China),
- Paragon Genomics, Inc. (US),
- NeoGenomics Laboratories (US).

#### Research Coverage

This research report categorizes the genotyping assay market by product & services, technology, application, end-user, and region. The scope of the report covers detailed information regarding the major factors, such as drivers, restraints, challenges, and opportunities, influencing the growth of the optometry equipment market. A detailed analysis of the key industry players has been done to provide insights into their business overview, solutions, and services; key strategies; Contracts, partnerships, agreements, new product & service launches, mergers and acquisitions, and recent developments associated with the genotyping assay market. Competitive analysis of upcoming startups in the optometry equipment market ecosystem is covered in this report.

Reasons to buy this report  
The report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall genotyping assay market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and to plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

- Analysis of key drivers (Technological advancements and reduced prices of DNA sequencing, Growing importance and use of genotyping in drug discovery and development), restraints (High manufacturing, installation, and maintenance costs of genotyping instruments), opportunities (Increasing application areas in genomics and genotyping analysis for animal genetics and agricultural biotechnology), and challenges (lack of adequate data management in genomics research) influencing the growth of the genotyping assay market.
- Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the genotyping assay market
- Market Development: Comprehensive information about lucrative markets - the report analyses the genotyping assay market across varied regions.
- Market Diversification: Exhaustive information about new products, untapped geographies, recent developments, and investments in the genotyping assay market
- Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players like Thermo Fisher Scientific Inc. (US), Illumina, Inc. (US), Danaher Corporation (US), Eurofins Scientific (Luxembourg), and QIAGEN (Netherlands). among others in genotyping assay market.

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**Genotyping Assay Market by Product & Services (Kits, Instruments, Bioinformatics),  
Technology (PCR, Sequencing, Microarray), Application (Pharmacogenomics, Animal  
Genetics), End User (PharmaBiotech Companies, Diagnostic Labs) - Global Forecast  
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