Biochips (Microarrays/Microfluidics) Global Market – Forecast To 2023

Description:

Biochips come handy as thousands of experiments are performed on a small chip with a solid platform and acts like a mini laboratory. Usage of biochips has increased in the past decade as its application varies from high throughput screening in drug discovery to personalized medicine.

The global biochips market is expected to grow at double digit CAGR to reach $17,851.1 million by 2023. Biochips market is mainly classified into technologies, products, application and end-users. The global biochips market is broadly classified as micro arrays and microfluidics based on technology. Based on products, the market is classified into Instruments, Reagents & Consumables and Software & Services. Biochips market is segmented on the basis of application as Genomics, Proteomics, Drug discovery, Diagnostics, Food & agricultural testing and others. Genomics application segment is further classified into SNP Genotyping, Gene Expression and Others whereas Drug discovery segment is further sub segmented into Target Identification & Validation, HTS (High Throughput screening) and Lead Optimization. Diagnostics segment is further divided into Cancer diagnostics and other diagnostics. End-Users are further classified into Pharmaceutical & Biotech companies, Academic & Research laboratories, Diagnostic laboratories, CROs (Contract and Research Organizations) and others.

Among microarrays and Microfluidics, Microfluidics occupies the major share in 2016 and is expected to grow at a highest CAGR from 2016 to 2023. Among products Reagents & consumables occupy the major share of XX% in 2016 and are expected to grow at a CAGR of XX% from 2016 to 2023 to reach $XX million by 2023. Among Application segment Diagnostics commanded the larger revenue in 2016 and is expected to grow at a highest CAGR of XX% from 2016 to 2023. Among Genomics, SNP genotyping occupies a major share in 2016 with a CAGR of XX% from 2016 to 2023. Target Identification & Validation in Drug discovery segment occupies a major share of XX% in 2016 and similarly other diagnostics occupies a major share of XX% in 2016 and grows with a CAGR of XX% from 2016 to 2023. Diagnostic laboratories occupy a major share of XX% in 2016 and grow with a maximum CAGR of XX% from 2016 to 2023.

Revolution in the field of genomics, proteomics as well as rapid drug discovery increased the demand for biochips. In addition, increase in diagnosis and treatment of cancer and genetic diseases, approval for personalized medicines and invention of novel technologies in biochips drives the market of biochips. Standardization and quality assurance of biochips, technological ease in handling the biochips especially in the areas of diagnosis and treatment, high cost along with ethical and social issues hinders the market growth.

Lifestyle changes owing to increase in cancer, diabetes and hypertension patients, early diagnosis and treatment of diseases, advancement of biochips with its wide application areas shows that biochip market has vast opportunities in the coming years. North America accounts for the highest market share in 2016 and followed by Europe. Steep rise in genetic diagnosis, huge corporate outsourcing for drug discovery, increase in personalized medicines and favourable government policies makes U.S. the leader of Biochips market. However, Asian countries especially China and Japan are the fastest growing regions with its growing demand for biochips and increasing research investments. Asia-Pacific grows with a highest CAGR of XX% from 2016 to 2023.

Major players in biochips market include Abbott laboratories (U.S.), Agilent Technologies (U.S.), Becton-Dickinson Company (U.S.), Bio-Rad Laboratories (U.S.), Danaher Corporation (U.S.), Fluidigm Corporation (U.S.), GE Healthcare (U.S.), Illumina (U.S.), PerkinElmer, Inc. (U.S.) and Thermo Fisher Scientific, Inc. (U.S.).

The report provides an in depth market analysis of the above mentioned segments across the following regions:

- North America
- Europe
- Asia-Pacific
- Rest of the World

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