owing to widepharmaceutical applicationsaa

Metagenomics is a key tool used in modernbiotechnology which helps in isolating and identifying microbesdirectly from their environments without the need to culture them in alaboratory. It allows the study of uncultured microbial communities that playimportant roles in various industrial domains such as bioremediation, biofuelproduction and disease diagnosis.

The

metagenomics market is estimated to be valued at USD 2.18 Bn in 2024 and is

expected to reach USD 3.77 Bn by 2031, exhibiting a compound annual growth rate

(CAGR) of 8.1% from 2024 to 2031.

Key Takeaways

Key players operating in the Metagenomics are Bio-Rad Laboratories, Inc., Illumina, Inc., PerkinElmer, Inc., Thermo FisherScientific, Inc., Novogene Co., Ltd., Promega Corporation, QIAGEN, TakaraBio, Inc., Oxford Nanopore Technologies, F. Hoffmann-La Roche Ltd, andPacBio. The growing application of

metagenomic techniques in drug discovery anddevelopment is expected to drive

the demand. Technological advancements including improvements in next-generation sequencing platforms and bioinformatics tools for data analysis

have enhanced metagenomic studies.

Market Trends

Growing adoption of shotgun Metagenomics

Market Size sequencing: It allows the profiling ofwhole microbial community structure without requiring priorknowledge of constituent species. It is increasingly being used for various applications including soil and water microbiome analysis.

Increasing focus on human microbiome analysis: Metagenomic techniques play a

vital role in characterizing human microbiomes in various bodily sites and linking them to health and disease conditions like obesity, diabetes, gastrointestinal disorders. This is expected to further widen the scope of metagenomics.

Market Opportunities

Wide scope in disease diagnosis: Metagenomic pathogen identification methods have

the potential to revolutionize infectious disease diagnostics by rapidly detecting pathogens directly from clinical samples without the need for

bootorial authuria