

# Recombinant DNA Technology Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2022-2027

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## Abstracts

The global recombinant DNA technology market reached a value of US\$ 690.4 Billion in 2021. Looking forward, IMARC Group expects the market to reach US\$ 925 Billion by 2027, exhibiting a CAGR of 4.9% during 2022-2027. Keeping in mind the uncertainties of COVID-19, we are continuously tracking and evaluating the direct as well as the indirect influence of the pandemic on different end use sectors. These insights are included in the report as a major market contributor.

The advent of recombinant DNA technology has revolutionized development in biology and offered new opportunities for innovations. Also known as genetic engineering, it is currently widely used to alter genetic material outside an organism and obtain improved and desired characteristics in living organisms. It includes the insertion of DNA fragments from several sources that have a desirable gene sequence through an appropriate vector. Besides this, it assists in the safe, affordable, and sufficient production of vital proteins required for dietary purposes and fighting health problems. As a result, it has multidisciplinary applications and a remarkable potential to improve health and enhance food resources and resistance to divergent adverse environmental effects.

### Recombinant DNA Technology Market Trends:

The recombinant DNA technology is utilized for improving different health conditions, mainly by developing new vaccines and pharmaceuticals. This, coupled with the improving treatment strategies on account of the developing diagnostics kits, monitoring devices, and new therapeutic approaches, represents one of the key factors impelling the growth of the market. Moreover, there is a rise in the research conducted on genetically modified organisms (GMO), which include microorganisms that are

considered as bio degraders and clean fuel producers. This can be accredited to rapid urbanization, growing global population, reducing arable land, considerable rising food shortage and increasing adoption of GMO crops. Apart from this, as recombinant DNA technology offers several innovation opportunities to develop a vast range of therapeutic products with immediate effect in medical genetics and biomedicine, its application is expanding in various sectors. For instance, the integration of recombinant DNA technology with effective gene therapy for replacing the defective gene with normal ones and the production of antigen-specific antibodies for clinical research, studies, and disease diagnosis, are anticipated to drive the market growth in the upcoming years.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global recombinant DNA technology market, along with forecasts at the global, regional and country level from 2022-2027. Our report has categorized the market based on product, component, application and end user.

#### Breakup by Product:

- Medical
  - Therapeutic Agent
  - Human Protein
  - Vaccines
- Non-Medical
  - Biotech Crops
  - Specialty Chemicals
  - Others

#### Breakup by Component:

- Expression System
- Cloning Vector

#### Breakup by Application:

- Food and Agriculture
- Health and Disease
- Environment
- Others

### Breakup by End User:

Biotechnology and Pharmaceutical Companies  
Academic and Government Research Institutes  
Others

### Breakup by Region:

North America  
United States  
Canada  
Asia-Pacific  
China  
Japan  
India  
South Korea  
Australia  
Indonesia  
Others  
Europe  
Germany  
France  
United Kingdom  
Italy  
Spain  
Russia  
Others  
Latin America  
Brazil  
Mexico  
Others  
Middle East and Africa

### Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being Amgen Inc, Cibus, F.Hoffmann-La Roche Ltd, GenScript, GlaxoSmithKline plc., Horizon Discovery Group plc, Merck KGaA, New England Biolabs, Novo Nordisk A/S, Pfizer Inc., Sanofi S.A and Syngene International

Ltd (Biocon Limited).

Key Questions Answered in This Report:

How has the global recombinant DNA technology market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global recombinant DNA technology market?

What are the key regional markets?

What is the breakup of the market based on the product?

What is the breakup of the market based on the component?

What is the breakup of the market based on the application?

What is the breakup of the market based on the end user?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global recombinant DNA technology market and who are the key players?

What is the degree of competition in the industry?

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