

Genetic Engineering Tool Market - Global Industry Size, Share, Trends, Opportunity and Forecast, 2018-2028 Segmented By Type (Genome Scale Editing Tools {CRISPR, MAGE, CRMAGE, CREATE, Others} v/s Genome Scale Engineering Tools {Promoter Engineering, Ribosomal Binding Site (RBS) Engineering, Synthetic Small Regulatory RNA, Others}), By Therapeutic Area (Sickle Cell Disease, Heart Disease, Diabetes, Alzheimer's Disease, Obesity, Others), By End User (Biotechnology & Pharmaceutical Companies, Academic & Research Institutions, Others), By Region and Competition

<https://marketpublishers.com/r/G57E738587D2EN.html>

Date: March 2023

Pages: 116

Price: US\$ 4,900.00 (Single User License)

ID: G57E738587D2EN

Abstracts

Global genetic engineering tool market is expected to show robust growth in the forecast years 2024-2028. This can be ascribed to the increasing advancements in the field of biotechnology and genetics. The growing popularity of genomic medicine and personalized medicine is driving the growth of the global genetic engineering tool market in the coming years. As of 2020, the number of personalized medicine available in the United States was around 286.

The process of using recombinant Deoxyribonucleic Acid (rDNA) technology to create alterations in the genetic map of an organism is categorized as genetic engineering. These alterations are done through various biotechnological processes like insertion, deletion, CRISPR, etc. These techniques are termed genetic engineering tools. Genetic

modifications have various purposes like pharmaceutical production, protein enhancement, genetic studies, etc., and thus genetic engineering tools are rapidly being introduced, and consistent research is being carried out.

Pharmaceutical Industry Growth Drives Market Growth

The Healthcare industry is rapidly expanding globally, and increasing financial aid for the development of the healthcare industry is further creating lucrative opportunities for the growth of market growth. One of the sectors, the pharmaceutical sector, is most advancing and registers phenomenal growth in the coming years due to the extended utilization of genetic engineering tools in their production, design, and manufacturing. The rapid growth of precision medicine, genomic medicine, and other advanced methods of therapeutics is further aiding the growth of the global genetic engineering tools market in the upcoming five years.

The first-ever successful product of genetic engineering in the pharmaceutical industry was protein drugs like insulin. Micro-organisms used as bioreactors were utilized to multiply the quantity of the protein and thus mass-produced the drug. Transgenic animals and transgenic plants are also utilized for the production of various protein drugs that are not possible to be produced in the micro-organisms.

Research & Technology Development Support Market Growth

Genetic engineering is a consistently developing sector of biotechnology. With prolonging and continuous research going on related to gene editing and genome manipulating studies, the global genetic engineering tool market is bound to register robust growth in the coming years. With the prevalence of chronic diseases and the surging demand for therapeutic approaches toward those diseases, the global genetic engineering tool market is supporting growth in the forecast period.

Minichromosomal technology and RNA transcription alterations are some of the major genetic engineering tools expecting more research, thereby supporting the growth of the global genetic engineering tools market in the coming years. CRISPR-Cas9 gene alterations is a gene therapy that is expected to aid market growth. Moreover, genetic engineering has various applications. Further applications of genetic engineering tools in genome modification are another prospective research segment that would drive the growth of the Global Genetic Engineering Tools market in the forecast years.

Genetic Engineering in Agriculture

Demands for advancement in the agriculture sector with the help of genetic engineering are further substantiating the growth of the global genetic engineering tool market in the coming years. According to the biotech lobbying group ISAAA, GM crops covered 191.7 million hectares in 2018, an increase of 1% from 2017. With 75 million hectares (39% of the world's area), the United States is the world's largest producer of GM crops. Increased crop yields, reduced costs for food or drug production, reduced need for pesticides, enhanced nutrient composition, and food quality, resistance to pests and disease, greater food security, and medical benefits to the world's growing population are some of the major advantages that involve the use of genetic engineering tools. The involvement of genetic engineering tools in agriculture to produce better crops will also drive the growth of the Global Genetic Engineering Tool market in the coming years.

Market Segmentation

Global genetic engineering tool market is segmented based on type, therapeutic area, end-user, and region. Based on type, the market is further fragmented into genome-scale editing tools and genome-scale engineering tools. Based on therapeutic areas, the market is bifurcated into sickle cell disease, heart disease, diabetes, Alzheimer's disease, obesity, and others. Based on end-user, the market is again sub-segmented into biotechnology & pharmaceutical companies, academic & research institutions, and others. The market analysis also studies the regional segmentation to devise regional market segmentation, divided among Asia-Pacific region, North American region, European region, South American region, and the Middle East & African region.

Company Profiles

Thermo Fisher Scientific Inc, CRISPR Therapeutics AG, Editas Medicine, Inc., Intellia Therapeutics, Inc, Merck KGaA, Horizon Discovery Ltd, GeneCopoeia Inc, Takara Bio Inc., Sangamo Therapeutics, Inc., Genscript Biotech Corporation, are among the major market players in the global platform that lead the market growth of the global genetic engineering tool market.

Report Scope:

In this report, global genetic engineering tool market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Genetic Engineering Tool Market, By Type:

Genome-Scale Editing Tools

CRISPR

MAGE

CRMAGE

CREATE

Others

Genome-Scale Engineering Tools

Promoter Engineering

Ribosomal Binding Site (RBS) Engineering

Synthetic Small Regulatory RNA

Others

Genetic Engineering Tool Market, By Therapeutic Area:

Sickle Cell Disease

Heart Disease

Diabetes

Alzheimer's Disease

Obesity

Others

Genetic Engineering Tool Market, By End User:

Biotechnology & Pharmaceutical Companies

Academic & Research Institutions

Others

Genetic Engineering Tool Market, By Region:

North America

United States

Mexico

Canada

Europe

France

Germany

United Kingdom

Italy

Spain

Asia-Pacific

China

India

Japan

South Korea

Australia

Thailand

Singapore

Middle East & Africa

South Africa

Saudi Arabia

UAE

Israel

South America

Brazil

Argentina

Colombia

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in global genetic engineering tool market.

Available Customizations:

With the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

Contents

1. PRODUCT OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
 - 1.2.1. Markets Covered
 - 1.2.2. Years Considered for Study
 - 1.2.3. Key Market Segmentations

2. RESEARCH METHODOLOGY

- 2.1. Objective of the Study
- 2.2. Baseline Methodology
- 2.3. Key Industry Partners
- 2.4. Major Association and Secondary Sources
- 2.5. Forecasting Methodology
- 2.6. Data Triangulation & Validation
- 2.7. Assumptions and Limitations

3. EXECUTIVE SUMMARY

- 3.1. Overview of the Market
- 3.2. Overview of Key Market Segmentations
- 3.3. Overview of Key Market Players
- 3.4. Overview of Key Regions/Countries
- 3.5. Overview of Market Drivers, Challenges, Trends

4. VOICE OF CUSTOMER

- 4.1. Commonly Used Genetic Engineering Techniques
- 4.2. Commonly Used Gene Editing Techniques
- 4.3. Benefits of Using Genetic Engineering Tools
- 4.4. Preference for Genetic Engineering Tools, By Therapeutic Area
- 4.5. Barriers to Adoption of Genetic Engineering Tools
- 4.6. Brand Awareness

5. GLOBAL GENETIC ENGINEERING TOOLS MARKET OUTLOOK

5.1. Market Size & Forecast

5.1.1. By Value

5.2. Market Share & Forecast

5.2.1. By Type (Genome Scale Editing Tools v/s Genome Scale Engineering Tools)

5.2.1.1. Genome Scale Editing Tools (CRISPR, MAGE, CRMAGE, CREATE, Others)

5.2.1.2. Genome Scale Engineering Tools (Promoter Engineering, Ribosomal Binding Site (RBS) Engineering, Synthetic Small Regulatory RNA, Others)

5.2.2. By Therapeutic Area (Sickle Cell Disease, Heart Disease, Diabetes, Alzheimer's Disease, Obesity, Others)

5.2.3. By End User (Biotechnology & Pharmaceutical Companies, Academic & Research Institutions, Others)

5.2.4. By Company (2022)

5.2.5. By Region

5.3. Market Map

5.3.1. By Type

5.3.2. By Therapeutic Area

5.3.3. By End User

5.3.4. By Region

6. NORTH AMERICA GENETIC ENGINEERING TOOLS MARKET OUTLOOK

6.1. Market Size & Forecast

6.1.1. By Value

6.2. Market Share & Forecast

6.2.1. By Type (Genome Scale Editing Tools v/s Genome Scale Engineering Tools)

6.2.1.1. Genome Scale Editing Tools (CRISPR, MAGE, CRMAGE, CREATE, Others)

6.2.1.2. Genome Scale Engineering Tools (Promoter Engineering, Ribosomal Binding Site (RBS) Engineering, Synthetic Small Regulatory RNA, Others)

6.2.2. By Therapeutic Area (Sickle Cell Disease, Heart Disease, Diabetes, Alzheimer's Disease, Obesity, Others)

6.2.3. By End User (Biotechnology & Pharmaceutical Companies, Academic & Research Institutions, Others)

6.2.4. By Country

6.3. North America: Country Analysis

6.3.1. United States Genetic Engineering Tools Market Outlook

6.3.1.1. Market Size & Forecast

6.3.1.1.1. By Value

6.3.1.2. Market Share & Forecast

6.3.1.2.1. By Type

- 6.3.1.2.2. By Therapeutic Area
- 6.3.1.2.3. By End User
- 6.3.2. Mexico Genetic Engineering Tools Market Outlook
 - 6.3.2.1. Market Size & Forecast
 - 6.3.2.1.1. By Value
 - 6.3.2.2. Market Share & Forecast
 - 6.3.2.2.1. By Type
 - 6.3.2.2.2. By Therapeutic Area
 - 6.3.2.2.3. By End User
- 6.3.3. Canada Genetic Engineering Tools Market Outlook
 - 6.3.3.1. Market Size & Forecast
 - 6.3.3.1.1. By Value
 - 6.3.3.2. Market Share & Forecast
 - 6.3.3.2.1. By Type
 - 6.3.3.2.2. By Therapeutic Area
 - 6.3.3.2.3. By End User

7. EUROPE GENETIC ENGINEERING TOOLS MARKET OUTLOOK

- 7.1. Market Size & Forecast
 - 7.1.1. By Value
- 7.2. Market Share & Forecast
 - 7.2.1. By Type (Genome Scale Editing Tools v/s Genome Scale Engineering Tools)
 - 7.2.1.1. Genome Scale Editing Tools (CRISPR, MAGE, CRMAGE, CREATE, Others)
 - 7.2.1.2. Genome Scale Engineering Tools (Promoter Engineering, Ribosomal Binding Site (RBS) Engineering, Synthetic Small Regulatory RNA, Others)
 - 7.2.2. By Therapeutic Area (Sickle Cell Disease, Heart Disease, Diabetes, Alzheimer's Disease, Obesity, Others)
 - 7.2.3. By End User (Biotechnology & Pharmaceutical Companies, Academic & Research Institutions, Others)
 - 7.2.4. By Country
- 7.3. Europe: Country Analysis
 - 7.3.1. France Genetic Engineering Tools Market Outlook
 - 7.3.1.1. Market Size & Forecast
 - 7.3.1.1.1. By Value
 - 7.3.1.2. Market Share & Forecast
 - 7.3.1.2.1. By Type
 - 7.3.1.2.2. By Therapeutic Area
 - 7.3.1.2.3. By End User

7.3.2. Germany Genetic Engineering Tools Market Outlook

7.3.2.1. Market Size & Forecast

7.3.2.1.1. By Value

7.3.2.2. Market Share & Forecast

7.3.2.2.1. By Type

7.3.2.2.2. By Therapeutic Area

7.3.2.2.3. By End User

7.3.3. United Kingdom Genetic Engineering Tools Market Outlook

7.3.3.1. Market Size & Forecast

7.3.3.1.1. By Value

7.3.3.2. Market Share & Forecast

7.3.3.2.1. By Type

7.3.3.2.2. By Therapeutic Area

7.3.3.2.3. By End User

7.3.4. Italy Genetic Engineering Tools Market Outlook

7.3.4.1. Market Size & Forecast

7.3.4.1.1. By Value

7.3.4.2. Market Share & Forecast

7.3.4.2.1. By Type

7.3.4.2.2. By Therapeutic Area

7.3.4.2.3. By End User

7.3.5. Spain Genetic Engineering Tools Market Outlook

7.3.5.1. Market Size & Forecast

7.3.5.1.1. By Value

7.3.5.2. Market Share & Forecast

7.3.5.2.1. By Type

7.3.5.2.2. By Therapeutic Area

7.3.5.2.3. By End User

8. ASIA-PACIFIC GENETIC ENGINEERING TOOLS MARKET OUTLOOK

8.1. Market Size & Forecast

8.1.1. By Value

8.2. Market Share & Forecast

8.2.1. By Type (Genome Scale Editing Tools v/s Genome Scale Engineering Tools)

8.2.1.1. Genome Scale Editing Tools (CRISPR, MAGE, CRMAGE, CREATE, Others)

8.2.1.2. Genome Scale Engineering Tools (Promoter Engineering, Ribosomal Binding Site (RBS) Engineering, Synthetic Small Regulatory RNA, Others)

8.2.2. By Therapeutic Area (Sickle Cell Disease, Heart Disease, Diabetes,

Alzheimer's Disease, Obesity, Others)

8.2.3. By End User (Biotechnology & Pharmaceutical Companies, Academic & Research Institutions, Others)

8.2.4. By Country

8.3. Asia-Pacific: Country Analysis

8.3.1. China Genetic Engineering Tools Market Outlook

8.3.1.1. Market Size & Forecast

8.3.1.1.1. By Value

8.3.1.2. Market Share & Forecast

8.3.1.2.1. By Type

8.3.1.2.2. By Therapeutic Area

8.3.1.2.3. By End User

8.3.2. India Genetic Engineering Tools Market Outlook

8.3.2.1. Market Size & Forecast

8.3.2.1.1. By Value

8.3.2.2. Market Share & Forecast

8.3.2.2.1. By Type

8.3.2.2.2. By Therapeutic Area

8.3.2.2.3. By End User

8.3.3. South Korea Genetic Engineering Tools Market Outlook

8.3.3.1. Market Size & Forecast

8.3.3.1.1. By Value

8.3.3.2. Market Share & Forecast

8.3.3.2.1. By Type

8.3.3.2.2. By Therapeutic Area

8.3.3.2.3. By End User

8.3.4. Japan Genetic Engineering Tools Market Outlook

8.3.4.1. Market Size & Forecast

8.3.4.1.1. By Value

8.3.4.2. Market Share & Forecast

8.3.4.2.1. By Type

8.3.4.2.2. By Therapeutic Area

8.3.4.2.3. By End User

8.3.5. Australia Genetic Engineering Tools Market Outlook

8.3.5.1. Market Size & Forecast

8.3.5.1.1. By Value

8.3.5.2. Market Share & Forecast

8.3.5.2.1. By Type

8.3.5.2.2. By Therapeutic Area

- 8.3.5.2.3. By End User
- 8.3.6. Thailand Genetic Engineering Tools Market Outlook
 - 8.3.6.1. Market Size & Forecast
 - 8.3.6.1.1. By Value
 - 8.3.6.2. Market Share & Forecast
 - 8.3.6.2.1. By Type
 - 8.3.6.2.2. By Therapeutic Area
 - 8.3.6.2.3. By End User
- 8.3.7. Singapore Genetic Engineering Tools Market Outlook
 - 8.3.7.1. Market Size & Forecast
 - 8.3.7.1.1. By Value
 - 8.3.7.2. Market Share & Forecast
 - 8.3.7.2.1. By Type
 - 8.3.7.2.2. By Therapeutic Area
 - 8.3.7.2.3. By End User

9. SOUTH AMERICA GENETIC ENGINEERING TOOLS MARKET OUTLOOK

- 9.1. Market Size & Forecast
 - 9.1.1. By Value
- 9.2. Market Share & Forecast
 - 9.2.1. By Type (Genome Scale Editing Tools v/s Genome Scale Engineering Tools)
 - 9.2.1.1. Genome Scale Editing Tools (CRISPR, MAGE, CRMAGE, CREATE, Others)
 - 9.2.1.2. Genome Scale Engineering Tools (Promoter Engineering, Ribosomal Binding Site (RBS) Engineering, Synthetic Small Regulatory RNA, Others)
 - 9.2.2. By Therapeutic Area (Sickle Cell Disease, Heart Disease, Diabetes, Alzheimer's Disease, Obesity, Others)
 - 9.2.3. By End User (Biotechnology & Pharmaceutical Companies, Academic & Research Institutions, Others)
 - 9.2.4. By Country
- 9.3. South America: Country Analysis
 - 9.3.1. Brazil Genetic Engineering Tools Market Outlook
 - 9.3.1.1. Market Size & Forecast
 - 9.3.1.1.1. By Value
 - 9.3.1.2. Market Share & Forecast
 - 9.3.1.2.1. By Type
 - 9.3.1.2.2. By Therapeutic Area
 - 9.3.1.2.3. By End User
 - 9.3.2. Argentina Genetic Engineering Tools Market Outlook

- 9.3.2.1. Market Size & Forecast
 - 9.3.2.1.1. By Value
- 9.3.2.2. Market Share & Forecast
 - 9.3.2.2.1. By Type
 - 9.3.2.2.2. By Therapeutic Area
 - 9.3.2.2.3. By End User
- 9.3.3. Colombia Genetic Engineering Tools Market Outlook
 - 9.3.3.1. Market Size & Forecast
 - 9.3.3.1.1. By Value
 - 9.3.3.2. Market Share & Forecast
 - 9.3.3.2.1. By Type
 - 9.3.3.2.2. By Therapeutic Area
 - 9.3.3.2.3. By End User

10. MIDDLE EAST AND AFRICA GENETIC ENGINEERING TOOLS MARKET OUTLOOK

- 10.1. Market Size & Forecast
 - 10.1.1. By Value
- 10.2. Market Share & Forecast
 - 10.2.1. By Type (Genome Scale Editing Tools v/s Genome Scale Engineering Tools)
 - 10.2.1.1. Genome Scale Editing Tools (CRISPR, MAGE, CRMAGE, CREATE, Others)
 - 10.2.1.2. Genome Scale Engineering Tools (Promoter Engineering, Ribosomal Binding Site (RBS) Engineering, Synthetic Small Regulatory RNA, Others)
 - 10.2.2. By Therapeutic Area (Sickle Cell Disease, Heart Disease, Diabetes, Alzheimer's Disease, Obesity, Others)
 - 10.2.3. By End User (Biotechnology & Pharmaceutical Companies, Academic & Research Institutions, Others)
 - 10.2.4. By Country
- 10.3. MEA: Country Analysis
 - 10.3.1. South Africa Genetic Engineering Tools Market Outlook
 - 10.3.1.1. Market Size & Forecast
 - 10.3.1.1.1. By Value
 - 10.3.1.2. Market Share & Forecast
 - 10.3.1.2.1. By Type
 - 10.3.1.2.2. By Therapeutic Area
 - 10.3.1.2.3. By End User
 - 10.3.2. Saudi Arabia Genetic Engineering Tools Market Outlook

- 10.3.2.1. Market Size & Forecast
 - 10.3.2.1.1. By Value
- 10.3.2.2. Market Share & Forecast
 - 10.3.2.2.1. By Type
 - 10.3.2.2.2. By Therapeutic Area
 - 10.3.2.2.3. By End User
- 10.3.3. UAE Genetic Engineering Tools Market Outlook
 - 10.3.3.1. Market Size & Forecast
 - 10.3.3.1.1. By Value
 - 10.3.3.2. Market Share & Forecast
 - 10.3.3.2.1. By Type
 - 10.3.3.2.2. By Therapeutic Area
 - 10.3.3.2.3. By End User
- 10.3.4. Israel Genetic Engineering Tools Market Outlook
 - 10.3.4.1. Market Size & Forecast
 - 10.3.4.1.1. By Value
 - 10.3.4.2. Market Share & Forecast
 - 10.3.4.2.1. By Type
 - 10.3.4.2.2. By Therapeutic Area
 - 10.3.4.2.3. By End User

11. MARKET DYNAMICS

- 11.1. Drivers
- 11.2. Challenges

12. MARKET TRENDS & DEVELOPMENTS

- 12.1. Recent Development
- 12.2. Mergers & Acquisitions
- 12.3. Product Launches

13. GLOBAL GENETIC ENGINEERING TOOL MARKET: SWOT ANALYSIS

14. PORTER'S FIVE FORCES ANALYSIS

- 14.1. Competition in the Industry
- 14.2. Potential of New Entrants
- 14.3. Power of Suppliers

14.4. Power of Customers

14.5. Threat of Substitute Products

15. COMPETITIVE LANDSCAPE

15.1. Business Overview

15.2. Product Offerings

15.3. Recent Developments

15.4. Financials (As Reported)

15.5. Key Personnel

15.6. SWOT Analysis

15.6.1. Thermo Fisher Scientific Inc

15.6.2. CRISPR Therapeutics AG

15.6.3. Editas Medicine, Inc.

15.6.4. Intellia Therapeutics, Inc

15.6.5. Merck KGaA

15.6.6. Horizon Discovery Ltd

15.6.7. GeneCopoeia Inc

15.6.8. Takara Bio Inc

15.6.9. Sangamo Therapeutics, Inc.

15.6.10. Genscript Biotech Corporation

16. STRATEGIC RECOMMENDATIONS

I would like to order

Product name: Genetic Engineering Tool Market - Global Industry Size, Share, Trends, Opportunity and Forecast, 2018-2028 Segmented By Type (Genome Scale Editing Tools {CRISPR, MAGE, CRMAGE, CREATE, Others} v/s Genome Scale Engineering Tools {Promoter Engineering, Ribosomal Binding Site (RBS) Engineering, Synthetic Small Regulatory RNA, Others}), By Therapeutic Area (Sickle Cell Disease, Heart Disease, Diabetes, Alzheimer's Disease, Obesity, Others), By End User (Biotechnology & Pharmaceutical Companies, Academic & Research Institutions, Others), By Region and Competition

Product link: <https://marketpublishers.com/r/G57E738587D2EN.html>

Price: US\$ 4,900.00 (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/G57E738587D2EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970