+44 20 8123 2220
info@marketpublishers.com

Cell-free Protein Expression Market Report by Product (Expression Systems, Reagents), Method (Transcription and Translation Systems, Translation Systems), Application (Enzyme Engineering, High Throughput Production, Protein Labeling, Protein-Protein Interaction, Protein Purification), End User (Pharmaceutical and Biotechnology Companies, Academic and Research Institutes, and Others), and Region 2024-2032

https://marketpublishers.com/r/C20CAE49A9E8EN.html
Date: March 2024
Pages: 144
Price: US$ 3,899.00 (Single User License)
ID: C20CAE49A9E8EN

Abstracts

The global cell-free protein expression market size reached US$ 265.3 Million in 2023. Looking forward, IMARC Group expects the market to reach US$ 487.7 Million by 2032, exhibiting a growth rate (CAGR) of 6.86% during 2024-2032.

Cell-free protein expression (CFPE) refers to the production of desired recombinant proteins in solution using biomolecular translation machinery extracted from cells. It can be carried out using different cell lysates, such as E. coli, rabbit reticulocytes, wheat germ, insect cells, and mammalian cell-free protein expression systems. They are widely used in enzyme engineering, protein labeling, protein purification, protein-protein interaction, and high throughput production of mutants. CFPE is also used for analyzing components needed for protein stability, degradation, and folding. As compared to cell-based protein expression, cell-free protein expression is time efficient and convenient, allows the incorporation of non-natural amino acids, and provides enhanced stability and specificity.

Cell-free Protein Expression Market Trends:

+44 20 8123 2220
info@marketpublishers.com

The rapid advancement in biological sciences is one of the key factors driving the market growth. Cell-free protein expression is extensively used in the expansion of genetic code, assembly of viruses, and the synthesis of recombinant proteins for various biomolecular processes. Furthermore, the increasing technique utilization in the pharmaceutical industry for developing protein-based therapeutics, such as antibodies, antimicrobials, and cytokines, for treating cancer and infectious diseases is acting as another growth-inducing factor. Additionally, the integration of machine learning (ML) algorithms to improve protein production yield by optimizing the system for efficient prototyping and high-throughput experimentation is providing an impetus to market growth. Moreover, the introduction of novel processes to produce complex prokaryotic and eukaryotic proteins using a continuous-exchange cell-free (CECF) protein synthesis system is creating a positive outlook for the market. Other factors, including the widespread adoption of cell-free methods for biomanufacturing and prototyping, extensive research and development (R&D) activities in proteomics and genomics, and the rising adoption in the healthcare industry for diagnostic applications, such as pathogen sensing, inflammatory response, and personalized medicine, are supporting drive the market growth.

Key Market Segmentation:
IMARC Group provides an analysis of the key trends in each sub-segment of the global cell-free protein expression market report, along with forecasts at the global, regional and country level from 2024-2032. Our report has categorized the market based on product, method, application and end user.

Breakup by Product:

Expression Systems
E. coli Cell-free Protein Expression System
Wheat Germ Cell-free Protein Expression System
Rabbit Reticulocytes Cell-free Protein Expression System
Insect Cells Cell-free Protein Expression System
Human Cell-free Protein Expression System
Others
Reagents

Breakup by Method:

Transcription and Translation Systems
Translation Systems

+44 20 8123 2220
info@marketpublishers.com

Breakup by Application:

Enzyme Engineering
High Throughput Production
Protein Labeling
Protein-Protein Interaction
Protein Purification

Breakup by End User:

Pharmaceutical and Biotechnology Companies
Academic and 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

+44 20 8123 2220
info@marketpublishers.com

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 Bioneer Corporation, biotechrabbit GmbH, Cambridge Isotope Laboratories Inc. (Otsuka Pharmaceutical Co. Ltd.), CellFree Sciences Co. Ltd., Cube Biotech GmbH, GeneCopoeia Inc., Jena Bioscience GmbH, Merck KGaA, New England Biolabs, Promega Corporation, Takara Bio Inc. and Thermo Fisher Scientific Inc.

Key Questions Answered in This Report

1. What was the size of the global cell-free protein expression market in 2023?
2. What is the expected growth rate of the global cell-free protein expression market during 2024-2032?
3. What are the key factors driving the global cell-free protein expression market?
4. What has been the impact of COVID-19 on the global cell-free protein expression market?
5. What is the breakup of the global cell-free protein expression market based on the product?
6. What is the breakup of the global cell-free protein expression market based on the method?
7. What is the breakup of the global cell-free protein expression market based on application?
8. What is the breakup of the global cell-free protein expression market based on the end user?
9. What are the key regions in the global cell-free protein expression market?
10. Who are the key players/companies in the global cell-free protein expression market?

+44 20 8123 2220
info@marketpublishers.com

Contents

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

10 MARKET BREAKUP BY REGION

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+44 20 8123 2220
info@marketpublishers.com

List Of Figures

LIST OF FIGURES

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: Cell-free Protein Expression Market Report by Product (Expression Systems, Reagents), Method (Transcription and Translation Systems, Translation Systems), Application (Enzyme Engineering, High Throughput Production, Protein Labeling, Protein-Protein Interaction, Protein Purification), End User (Pharmaceutical and Biotechnology Companies, Academic and Research Institutes, and Others), and Region 2024-2032

Product link: https://marketpublishers.com/r/C20CAE49A9E8EN.html

Price: US$ 3,899.00 (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/C20CAE49A9E8EN.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

Custumer signature _____

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

+44 20 8123 2220
info@marketpublishers.com

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