

Cell Lysis Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 120 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

The cell lysis market is expected to register a CAGR of 8.5% over the forecast period.

Severe respiratory consequences of the COVID-19 pandemic prompted an urgent need for novel therapies that increased the number of drug discoveries, thereby positively impacting the cell lysis market. Several research studies were conducted to understand the effect of cell lysis on coronavirus. For instance, during the peak of the COVID-19 pandemic, the Department of Biotechnology (DBT) in India undertook a project to sequence 1,000 SARS-CoV-2 genomes from samples to understand the evolving behavior of the virus. The samples were collected across India to study the emerging mutations in the virus and how they change the symptoms of the disease. The increase in research activities that used different processes increased the demand for cell lysis devices and reagents.

The market is expected to grow due to increased expenditure on research and development, increasing application in the pharmaceutical and biopharmaceutical industries, and a rising focus on personalized medicine. Personalized medicine is one of the latest developments of gene-related studies that provide custom-tailored treatments as per the specific needs of patients, which has massive significance in disease prevention, diagnosis, prognosis, and therapeutics. According to the GLOBOCAN, in 2020, there were around 19,292,789 new cancer cases worldwide and about 9,958,133 deaths due to cancer. With the increase in the prevalence of infectious diseases and cancers, the use of cell samples for research and development of drugs also increases, which is expected to support the growth of the cell lysis market.

The high adoption of cell lysis and disruption methods during downstream processing to manufacture bio-therapeutics and other recombinant products further boosts the overall market growth. Furthermore, rising investments by governments and private organizations in R&D related to biotechnological processes and academics are expected to drive the market significantly. However, regulatory compliance and issues in the mechanical process in applying at the microscale level are some factors that might hinder market growth.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scott-international.com

www.scott-international.com

Cell Lysis Market Trends

Instruments are Expected to Witness Significant Growth in the Coming Years

Instruments are tools or devices used to lyse the cells. They are further categorized as sonicators, homogenizers, French press, microfluidizers, and others. Instruments like homogenizers and sonicators are used mostly for cell lysis/cell fractionation, and sonicators have the highest demand due to their increasing use in cell fractionation.

Recent advancements in cell lysis allowed the emergence of microfluidic devices in the cell lysis process. For instance, as per a study published by a Biotechnology Journal in April 2022, microfluidic technology is widely used for cell lysis. Separation and lysis of RBCs are helpful in the diagnosis of several diseases, which augments the demand for microfluidics in cell lysis, thus contributing to market growth.

With the rising number of chronic diseases and infectious diseases, there is a high demand in research laboratories and institutes and biopharmaceutical and biotechnology companies, which boosted the overall drug demand. For instance, as per the data from the American Cancer Society report published in 2022, around 1,918,030 new cancer cases were expected in the United States in 2022. This high number of cancer cases indicates the need for research and diagnosis of the disease, which is expected to propel the growth of the segment. The commercial availability and reliability of tools used in cell disruption and lysis also boost the growth of this segment.

North America is Expected to Dominate the Market Over the Forecast Period

North America is spearheading the cell lysis market due to the increasing expenditure on research and development and increasing incidence of chronic diseases. With the rise in COVID-19, there was an increase in lab testing techniques, which was anticipated to intensify the progress of the cell lysis market. Furthermore, scientists researching COVID-19 cellular response and developing vaccines created a huge demand for cell lysis systems and reagents. Thus, increasing research in the region had a positive impact on the market.

The increasing demand for cell-based therapies for the treatment of cancer is also expected to augment the growth of the cell lysis market. The increasing prevalence and incidence of several diseases and rising research and development expenditure in North America trigger the need for an advanced research and development scenario across all life sciences sectors. According to the Pharmaceutical Research and Manufacturers Association (PhRMA), in 2021, US companies conducted over half the world's research and development in pharmaceuticals. The same source stated that approximately USD 102 billion was invested in biopharmaceutical R&D in the United States in 2021. ?

Hence, the continuous growth of healthcare infrastructure in the United States and the increase in the patient population provide wider opportunities for clinical laboratories to expand and help boost market growth.

Cell Lysis Market Competitor Analysis

The market studied is moderately competitive and consists of local and international companies. Some players include Thermo Fisher Scientific Inc., Merck KGaA, F. Hoffmann-La Roche Ltd, Qiagen NV, Becton, and Dickinson and Company, among others. These companies focus on novel product developments and acquisitions/collaborations to enhance their market positions. With advancements in the pharmaceutical and biotechnology sector, few small to mid-sized companies have entered the market. It is believed that these companies will hold a substantial share of the market studied in the future. Competition is also increasing due to new product launches in this market.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Additional Benefits:

The market estimate (ME) sheet in Excel format
3 months of analyst support

Table of Contents:

1 INTRODUCTION

1.1 Study Assumptions and Market Definition

1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET DYNAMICS

4.1 Market Overview

4.2 Market Drivers

4.2.1 Increasing Expenditure in Research and Development

4.2.2 Increasing Application in the Pharmaceutical and Biopharmaceutical Industries

4.2.3 Rising Focus on Personalized Medicine

4.3 Market Restraints

4.3.1 Regulatory Compliance

4.3.2 Issues in Mechanical Process to Apply at the Microscale Level

4.4 Porter's Five Forces Analysis

4.4.1 Threat of New Entrants

4.4.2 Bargaining Power of Buyers/Consumers

4.4.3 Bargaining Power of Suppliers

4.4.4 Threat of Substitute Products

4.4.5 Intensity of Competitive Rivalry

5 MARKET SEGMENTATION (Market Size - Value in USD million)

5.1 By Type of Product

5.1.1 Instruments

5.1.1.1 Homogeniser

5.1.1.2 Centrifugation

5.1.1.3 Other Types of Products

5.1.2 Reagents

5.2 By Type of Cells

5.2.1 Mammalian Cells

5.2.2 Microbial Cells

5.2.3 Plant Cells

5.3 By End User

5.3.1 Biotechnology or Biopharmaceutical Companies

5.3.2 Research Laboratories and Academic Institutes

5.3.3 Other End Users

5.4 Geography

5.4.1 North America

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 5.4.1.1 United States
- 5.4.1.2 Canada
- 5.4.1.3 Mexico
- 5.4.2 Europe
 - 5.4.2.1 Germany
 - 5.4.2.2 United Kingdom
 - 5.4.2.3 France
 - 5.4.2.4 Italy
 - 5.4.2.5 Spain
 - 5.4.2.6 Rest of Europe
- 5.4.3 Asia-Pacific
 - 5.4.3.1 China
 - 5.4.3.2 Japan
 - 5.4.3.3 India
 - 5.4.3.4 Australia
 - 5.4.3.5 South Korea
 - 5.4.3.6 Rest of Asia-Pacific
- 5.4.4 Middle East
 - 5.4.4.1 GCC
 - 5.4.4.2 South Africa
 - 5.4.4.3 Rest of Middle East
- 5.4.5 South America
 - 5.4.5.1 Brazil
 - 5.4.5.2 Argentina
 - 5.4.5.3 Rest of South America

6 COMPETITIVE LANDSCAPE

6.1 COMPANY PROFILES

- 6.1.1 Becton, Dickinson and Company
- 6.1.2 Bio-Rad Laboratories Inc.
- 6.1.3 Danaher Corporation
- 6.1.4 Eppendorf AG
- 6.1.5 F. Hoffmann-La Roche Ltd
- 6.1.6 Labfreez Instruments Group Co. Ltd
- 6.1.7 Merck KGaA
- 6.1.8 Qsonica LLC
- 6.1.9 Takara Bio Inc.
- 6.1.10 Thermo Fisher Scientific Inc.
- 6.1.11 Cell Signaling Technology Inc.
- 6.1.12 Miltenyi Biotec
- 6.1.13 QIAGEN NV
- 6.1.14 Claremont BioSolutions LLC
- 6.1.15 Microfluidics International Corporation

7 MARKET OPPORTUNITIES AND FUTURE TRENDS

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Cell Lysis Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 120 pages | Mordor Intelligence

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-06-09"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

