

Global Pyrogen Testing - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029

Market Report | 2024-02-17 | 115 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 Global Pyrogen Testing Market size is estimated at USD 1.48 billion in 2024, and is expected to reach USD 2.09 billion by 2029, growing at a CAGR of 7.13% during the forecast period (2024-2029).

The market is primarily driven by increased demand for pyrogenic testing products in the pharmaceutical and biotechnology industries and rising R&D expenditure in life science.

With the rising COVID-19 pandemic, the demand for pyrogen testing techniques has witnessed steady growth during the past decade due to the increasing prevalence of infectious diseases. With an increase in the incidence of infectious diseases, the demand for pyrogen testing is expected to increase during the forecast period. The endotoxin identification products can help improve the management of infectious diseases, especially in areas with inadequate healthcare infrastructure. This has led to an increase in the adoption of pyrogen testing products that helps the market grow.

Pyrogen testing is being used by pharmaceutical, biotech, and various drug manufacturing companies for the safe manufacturing and release of infection-free products into the market. Biotechnology industries have become pivotal for R&D efforts for newer healthcare and biological applications. It is thus expected to become a critical factor for determining microbes or the presence of metabolites in drugs during their manufacture.

The rising demand for pyrogen products and partnerships are expected to boost the market growth. For instance, Fujifilm Wako Chemicals provides instruments for endotoxin testing, which include Toxinometer ET-6000. This instrument can incorporate basically three testing methods Gel-clot, KTA (Kinetic Turbidimetric Assay), and KCA (Kinetic Chromogenic Assay). The toxinometer provides ease of use during the testing process as it can start a new assay while another assay is still running, which

Scotts International. EU Vat number: PL 6772247784

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

www.scott-international.com

helps in the retesting of a sample. In addition, Fujifilm Wako Chemicals planned to launch the Toxinometer ET-7000 Series in 2019, which is a computer-operated instrument and has been made more user-friendly. Therefore, the increasing product launches ultimately lead to the market growth.

There are also rising R&D expenditure that has helped in driving the overall market growth. According to the 2019 European Federation of Pharmaceutical Industries and Associations (EFPIA) report, in Europe, the pharmaceutical industry invested around EUR 36,500 million in R&D in 2018. The rapidly growing pharmaceutical and biotechnology industries are expected to drive the growth of the market studied. Pyrogen testing is used by pharmaceutical, biotech, and various drug manufacturing companies for the safe manufacturing and release of infection-free products into the market.

There is also a rising need for biologics that have resulted in unprecedented growth in the number of biopharmaceutical companies. This has helped to develop therapeutically advanced drugs on a large scale, which has compelled manufacturers to improve on aspects, such as productivity, cost-efficiency, and deviations. Companies are, thus, implementing good manufacturing practices through biological testing at various levels of production cycles, thereby contributing toward the growth of the market.

Furthermore, the increase in chronic disease prevalence in developed countries has also boosted the demand for pyrogen testing along with the increasing awareness that is expected to result in high growth during the forecast period.

Pyrogen Testing Market Trends

The Monocyte Activation Test Segment is Expected to Witness Good Growth Over the Forecast Period

The monocyte activation test is used to detect or quantify substances that activate human monocytes or monocytic cells to release endogenous mediators, which have a role in the human fever response. This test provides a more relevant prediction of pyrogenic activity than the RPT; it can detect endotoxin and non-endotoxin pyrogens and applies to a greater variety of products than the RPT. Therefore, it is more accurate as well as more cost- and time-effective than the RPT test.

With the rising COVID-19 pandemic, the market is expected to grow as there is an increased demand for testing and vaccine manufacturing that further boosts the overall market growth. Based on the 2020 study, it has been found that the circulating monocytes and tissue macrophages participate in all stages of SARS COVID-19. They are found to contribute to clinical infection, virus resistance, and to host factors that determine disease severity, recovery, and sequelae. Therefore, the MAT test during COVID-19 vaccine development and manufacturing is found to be an important contribution to ensure human protection.

As per the publication in the Brazilian Journal of Pharmaceutical Science, the monocyte activation test is getting more attention across the pharmaceutical industry, which is boosting the growth.

In July 2020, Lonza and Sanquin Reagents entered a strategic partnership for the commercialization of a range of specialized reagents for pyrogen testing of parenteral pharmaceuticals and medical devices using the monocyte activation test. This partnership has helped expand Lonza's extensive portfolio of endotoxin testing products. Hence, all these factors are found to boost the overall market growth.

North America is Expected to Dominate the Pyrogen Testing Market in the Forecast Period

North America is found to dominate the overall market due to the well-established healthcare infrastructure, better regulatory framework and government support, and presence of many large biotechnological and biopharmaceutical firms, such as Merck and Lonza Group, among others. There is also a well-established healthcare infrastructure, better regulatory framework, increasing prevalence of chronic and infectious diseases, which are some of the factors expected to drive the overall market.

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

With the rising burden of COVID-19 and other infectious diseases, there is an increasing number of pharmaceutical and biopharmaceutical companies that have looked forward to developing treatments and vaccines that target the infection caused by the novel coronavirus.

There is also a rise in the awareness initiatives for healthcare in the region that support the growth of the pyrogen testing market. For instance, in June 2019, the Global Endotoxin Testing Summit was being held, which brought together the community to explore the most pertinent topics in the industry that included the Recombinant Factor C, the history of pyrogen detection and future trends, the evolution of endotoxin standards, and many others. Hence, all such factors have raised awareness and are expected to drive the overall pyrogen testing market in the United States.

Furthermore, with the growing importance of healthcare and rising awareness regarding toxicity in drugs and medical devices, the demand for pyrogen testing has increased drastically in the pharmaceutical and biological products industries. Moreover, pyrogen testing plays a crucial role in ensuring safety measures in medical devices and pharmaceutical products with parenteral administration.

Pyrogen Testing Industry Overview

The market for pyrogen testing is moderately competitive and is dominated by a few major players, such as Merck KGaA, Lonza Group, BioMerieux, and GenScript. The major companies are found undertaking various strategy initiatives, such as new product developments, mergers, acquisitions, collaborations, and regional expansions to serve the unmet needs of their customers. Along with this, the rising innovations have promoted the entry of novel players who are also entering the market and throwing competition to gain the market share. Partnerships with multinational companies to strengthen their market reach and goodwill are also anticipated to be a major market strategy in the pyrogen testing market.

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 Rapid Growth in Pharmaceutical and Biotechnology Industries

4.2.2 Rising R&D Expenditure in Life Science

4.3 Market Restraints

4.3.1 Stringent Government Regulations

4.4 Porter's Five Forces Analysis

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

- 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

- 5.1 By Product
 - 5.1.1 Kits and Reagents
 - 5.1.2 Services
 - 5.1.3 Instruments
- 5.2 By Test Type
 - 5.2.1 LAL Tests
 - 5.2.1.1 Chromogenic Tests
 - 5.2.1.2 Turbidimetric Tests
 - 5.2.1.3 Gel Clot Tests
 - 5.2.2 Rabbit Pyrogen Test
 - 5.2.3 Monocyte Activation Test
 - 5.2.4 Other Test Types
- 5.3 By End User
 - 5.3.1 Pharmaceutical and Biotechnology Companies
 - 5.3.2 Medical Device Companies
 - 5.3.3 Other End Users
- 5.4 Geography
 - 5.4.1 North America
 - 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 and Africa
 - 5.4.4.1 GCC
 - 5.4.4.2 South Africa
 - 5.4.4.3 Rest of Middle-East and Africa
 - 5.4.5 South America

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

- 5.4.5.1 Brazil
- 5.4.5.2 Argentina
- 5.4.5.3 Rest of South America

6 COMPETITIVE LANDSCAPE

6.1 Company Profiles

- 6.1.1 Associates of Cape Cod Inc. (Seikagaku Biobusiness Corporation)
- 6.1.2 BioMerieux SA
- 6.1.3 Charles River Laboratories Inc.
- 6.1.4 Ellab AS
- 6.1.5 Genscript
- 6.1.6 Lonza Group
- 6.1.7 Merck Kgaa
- 6.1.8 Thermo Fisher Scientific Inc.
- 6.1.9 Fujifilm Holdings Corporation (FUJIFILM Wako Pure Chemical Corporation)
- 6.1.10 WUXI Pharmatech (Cayman) Inc.
- 6.1.11 Eurofins Scientific
- 6.1.12 Microcoat Biotechnologie GmbH
- 6.1.13 Sotera Health (Nelson Laboratories LLC)
- 6.1.14 Sanquin
- 6.1.15 Pyrostar
- 6.1.16 Microcoat Biotechnologie GmbH

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

Global Pyrogen Testing - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029

Market Report | 2024-02-17 | 115 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="2026-03-06"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

