

# **In-Vitro Toxicology/Toxicity Testing Market by Product & Services, Toxicity Endpoint & Test (Carcinogenicity, Dermal Toxicity), Technology (Cell-based, HTS), Method (Cellular Assays), Industry (Pharmaceutical, Cosmetics), Region-Global Forecast to 2024**

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## **Abstracts**

“The global in-vitro toxicology testing market is projected to grow at a CAGR of 9.3%.”

The in-vitro toxicology testing market is expected to reach USD 12.7 billion by 2024 from an estimated USD 8.1 billion in 2019, at a CAGR of 9.3%. The opposition to animal testing, technological advancements, and increasing R&D expenditure to detect toxicity at an early stage during drug development are the primary growth factors for this industry. The increasing focus of the pharmaceutical and cosmetics industries on using in-vitro methods for product testing along with the improvement in silico methods for predictive toxicology studies are expected to offer significant growth opportunities for players in this market. However, the dearth of skilled professionals is a substantial market challenge.

“The software segment is expected to grow at the highest rate during the forecast period.”

Based on the product & service, the in-vitro toxicology testing market is segmented into consumables, assays, equipment, software, and services. The software segment is projected to witness the highest growth in the in-vitro toxicology testing market during the forecast period. Growth in this segment is driven mostly by the rising number of new technologies to develop in-vitro signatures and computational models capable of predicting in vivo responses. Also, the increasing use of the latest software in the industry and the academia to predict toxicity by comparing the data of new substances

with other structurally or biologically similar compounds, are expected to drive the growth of this segment.

The ADME segment is expected to account for the largest market share in 2018.”

Based on toxicity endpoints & tests undertaken across all industries, the in-vitro toxicity testing market is segmented into ADME; skin irritation, corrosion, and sensitization; genotoxicity; cytotoxicity; ocular toxicity; organ toxicity; phototoxicity; dermal toxicity; and other endpoints & tests. The ADME segment accounted for the largest share of the in-vitro toxicity testing market in 2018. This can be attributed to the high adoption during the drug development process with the advantage of producing highly reproducible & accurate data.

“Toxicogenomics is expected to grow at the highest rate during the forecast period.”

The toxicogenomics segment is expected to grow at the highest CAGR during the forecast period, primarily due to the technological advancements taking place in the field of proteomics and genomics. Also, the improvements in proteomic technologies are enhancing the study of gene & protein activity during toxicity analysis. Technological advancements taking place in the field of proteomics and genomics will further drive the growth of this segment in the coming years.

“Europe is expected to hold the largest share for players operating in the in-vitro toxicology testing market.”

Europe accounted for the largest share of the in-vitro toxicology testing market in 2018. Factors such as high adoption of in-vitro toxicology testing assays and services in the cosmetics and chemical industries after the ban on animal testing in the region are among the few factors expected to contribute to the growth of this market.

A breakdown of the primary participants referred to for this report is provided below:

By Company Type: Tier 1 (35%), Tier 2 (45%), and Tier 3 (20%)

By Designation: C-level (35%), Director-level (25%), and Others (40%)

By Region: North America (45%), Europe (30%), Asia Pacific (20%), Latin America (3%), and the Middle East & Africa (2%)

The prominent players in the in-vitro toxicology testing market include Thermo Fisher Scientific Inc. (US), Covance (US), Bio-Rad Laboratories, Inc. (US), GE Healthcare (US), Eurofins Scientific SE (Luxembourg), Merck KGaA (Germany), Charles River Laboratories International, Inc. (US), Catalent, Inc. (US), Cyprotex (UK), SGS S.A. (Switzerland), QIAGEN N.V. (Germany), Promega Corporation (US), Gentronix Limited (UK), BioIVT (US), and MB Research Laboratories (US).

#### Research Coverage:

This report analyzes the market for various in-vitro toxicology testing products and their adoption patterns. It aims at estimating the market size and future growth potential of the global in-vitro toxicology testing market and its product & service, technology, toxicity endpoint & test, industry, method, and regional segments. The report also includes an in-depth competitive analysis of the key players in this market, along with their company profiles, product offerings, and recent developments.

#### Reasons to Buy the Report

The report will enrich established firms as well as new entrants/smaller firms to gauge the pulse of the market, which, in turn, would help them garner a greater share. Firms purchasing the report could use one or any combination of the below-mentioned five strategies for strengthening their market presence.

This report provides insights on the following pointers:

**Market Penetration:** Comprehensive information on the product portfolios offered by the top players in the global in-vitro toxicology testing market

**Product Development/Innovation:** Detailed insights on the upcoming trends, R&D activities, and product launches in the global in-vitro toxicology testing market

**Market Development:** Comprehensive information on the lucrative emerging regions

**Market Diversification:** Exhaustive information about the new product, growing geographies, and recent developments in the global in-vitro toxicology testing market

Competitive Assessment: In-depth assessment of market ranking, growth strategies, revenue analysis, and services of leading players in the global in-vitro toxicology testing market

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