

In Vitro Toxicology Testing Market by Product & Service (Assays (ELISA & Western Blot), Equipment, Consumable, Software), Toxicity Endpoints (ADME, Genotoxicity, Cytotoxicity), Technology, Method, Industry (Pharma, Cosmetics) - Global Forecast to 2028

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Report description:

The in vitro toxicology testing market is projected to reach USD 17.1 billion by 2028 from an estimated USD 10.8 billion in 2023, at a CAGR of 9.5% during the forecast period. The growth of this market can be attributed to the technological advancements in toxicology equipment, research and development efforts aimed at early-stage toxicity detection, and growing focus on drug discovery and personalized medicine using in vitro toxicology testing methods and increasing focus on predictive toxicology.

"The consumables segment accounted for the largest share by product & services in 2022."

In 2022, the consumables segment accounted for the largest share of product & service in the global In vitro toxicology testing market. The factors like growing focus on improving product safety across industries, such as pharmaceutical, food, cosmetics, and chemicals, are driving the demand for consumables in the in vitro toxicology testing market. The increasing demand for high-quality reagents and the repeated use of media and reagents in vitro toxicology studies are also driving the growth of this market. Furthermore, the market share of the consumables market is expected to grow simultaneously with the increasing adoption of in vitro toxicology testing across various industries.

"The Europe has continued to dominate the in vitro toxicology testing market during the forecast period of 2023-2028."

The ban on animal testing in the region is the major factor driving the adoption of in vitro toxicology testing across all industries. Europe dominated the global in vitro toxicology testing market in 2022. This dominance is attributed to the presence of over 33 scientific facilities and research centers, often associated with cosmetic manufacturers, fostering a dynamic and highly innovative cosmetics industry. Additionally, the region is experiencing increased investments in biologics and advanced dosage forms, partly

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driven by the impending patent expiration of numerous blockbuster drugs. The growing need to expedite the drug development process, which typically spans 10 to 12 years, has further fueled the demand for in vitro toxicology testing. Notably, the European Union has been at the forefront of supporting research for the development and validation of advanced in vitro toxicology testing protocols for regulatory purposes. Consequently, the European market is witnessing growth due to the development of novel drugs and personal care products, the research and development efforts of EU member states to find alternatives to animal testing, and the ban on cosmetics tested on animals.

The primary interviews conducted for this report can be categorized as follows:

- By Respondent: Supply Side- 70% and Demand Side 30%
 - By Designation: Managers - 45%, CXO & Directors - 30%, and Executives - 25%
 - By Region: North America -40%, Europe -25%, Asia-Pacific -20%, Latin America -10% and Middle East & Africa- 5%
- List of Companies Profiled in the Report:

- Thermo Fisher Scientific Inc. (US)
- Merck KGaA (Germany)
- Eurofins Scientific (Luxembourg)
- Laboratory Corporation of America Holdings (US)
- Charles River Laboratories (US)
- SGS SA (Switzerland)
- Bio-Rad Laboratories, Inc. (US)
- Evotec SE (Germany)
- Promega Corporation (US)
- Catalent, Inc. (US)
- Agilent Technologies, Inc. (US)
- Intertek Group plc (UK)
- Revvity (US)
- Inotiv (US)
- BioIVT (US)
- Lonza (Switzerland)
- Creative Biolabs (US)
- Shanghai Medicilon Inc. (China)
- Creative Bioarray (US)
- Aragen Life Sciences Ltd. (India)
- Enzo Biochem Inc. (US)
- Microbac Laboratories, Inc. (US)
- Vimta Labs Ltd. (India)
- Pacific BioLabs Inc. (US)
- MB Research Laboratories (US)

Research Coverage:

This research report categorizes the In vitro toxicology testing market by product and service (consumables, assays, equipment, software, and services), toxicity endpoints & tests (absorption, distribution, metabolism, and excretion (ADME), skin irritation, corrosion, and sensitization, genotoxicity, cytotoxicity, ocular toxicity, organ toxicity, phototoxicity, dermal toxicity, and other toxicity endpoints & tests), industry (pharmaceutical & biopharmaceutical, consumer care, food, and other industries (including chemical and medical device industries), technologies (cell culture, high-throughput screening, and toxicogenomics), method (cellular assays, biochemical assays, molecular toxicology assays, ex-vivo model, and in silico models.)

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The report's scope encompasses detailed information regarding major influencing factors such as drivers, trends, challenges, and opportunities shaping the growth of the in vitro toxicology testing market. A comprehensive analysis of key industry players has been conducted to offer insights into their business overview, products, key strategies, collaborations, partnerships, and agreements. The report also covers recent developments, including new product launches, mergers, and acquisitions, in the in vitro toxicology testing market.

Key Benefits of Buying the Report:

The report will help market leaders/new entrants by providing them with the closest approximations of the revenue numbers for the overall in vitro toxicology testing market and its subsegments. It will also help stakeholders better understand the competitive landscape and gain more insights to better position their business and make suitable go-to-market strategies. This report will enable stakeholders to understand the market's pulse and provide them with information on the key market drivers, restraints, opportunities, and challenges.

The report provides insights on the following pointers:

- Analysis of key drivers (growing public resistance against animal testing, technological advancements, and research and development efforts aimed at early-stage toxicity detection), restraints (resistance of certain regulatory bodies to embrace alternative approaches in toxicology testing, failure to establish intricacies of in vivo conditions, and, lack of in vitro models to study complex endpoints), opportunities (Growing focus on drug discovery and personalized medicine using in vitro methods, Increasing number of toxicology databases, Increasing focus on predictive toxicology), and challenges (lack of data availability and validation, complexity in data analysis and management) influencing the growth of the market.
- Product/Service Development/Innovation: Detailed insights on newly launched products/services of the In vitro toxicology testing market
- Market Development: Comprehensive information about lucrative markets - the report analyses the market across varied regions.
- Market Diversification: Exhaustive information about new products, untapped geographies, recent developments, and investments in the In vitro toxicology testing market
- Competitive Assessment: Thermo Fisher Scientific Inc. (US), Merck KGaA (Germany), Eurofins Scientific (Luxembourg), Laboratory Corporation of America Holdings (US), Charles River Laboratories (US), SGS SA (Switzerland), Bio-Rad Laboratories, Inc. (US), Evotec SE (Germany), Promega Corporation (US), Catalent, Inc. (US), Agilent Technologies, Inc. (US), Intertek Group plc (UK), Revvity (US), Inotiv (US), BioIVT (US), Lonza (Switzerland), Creative Biolabs (US), Shanghai Medicilon Inc. (China), Creative Bioarray (US), Aragen Life Sciences Ltd. (India), Enzo Biochem Inc. (US), Microbac Laboratories, Inc. (US), Vimta Labs Ltd. (India), Pacific BioLabs Inc. (US), and MB Research Laboratories (US) and among others in the market.

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