

Global Markets for Research Antibodies

Market Research Report | 2024-01-10 | 485 pages | BCC Research

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Report description:

Description

Report Scope:

This study focuses on the market side of research antibodies, as opposed to the technical side. Different market segments for this specific market are covered. Application-based market segments include enzyme-linked immunosorbent assay (ELISA), western blotting (WB), immunohistochemistry (IHC)(types of tissue multiplexing segments), immunofluorescent staining (IF), immunoprecipitation and flow cytometry (FC); antibody function-based market segments include primary antibodies and secondary antibodies; antibody clonality-based market segments include polyclonal antibodies and monoclonal antibodies, including recombinant antibodies; customer type-based market segments include universities and academic institutions, pharmaceutical and biotech companies and other types of customers (e.g., governmental research labs, contract research organizations [CROs]); geography-based market segments include North America, Europe, Asia-Pacific and Rest of World. Research and market trends are also extrapolated by analyzing the funding, patent publications and sales trends of major players in the field.

In this report, the market for research antibodies is segmented based on product type, clonality, host species, major reactivities, applications, end-user, and geography. Based on application type, the market is segmented into enzyme-linked immunosorbent assay (ELISA), western blotting (WB), immunohistochemistry (IHC) (i.e., types of tissue multiplexing segments), immunofluorescent staining (IF), immunoprecipitation and flow cytometry (FC). Based on major reactivities, the market is segmented into anti-human, anti-rat and anti-mouse. The market is also presented based on product type, which is further segmented into primary and secondary antibodies.

The market has been geographically segmented into the North America, Europe, Asia-Pacific and Rest of the World (i.e., South America, Middle East and Africa) regions. Detailed analysis of major countries (e.g., the U.S., Germany, the U.K., Italy, France,

Spain, Japan, China, India, Brazil, Mexico, and GCC countries) will be covered in the regional segment. For market estimates, data will be provided for 2022 as the base year, with estimates for 2023 and forecast value for 2028.

Report Includes:

- 145 data tables and 45 additional tables

- An overview of the global market landscape related to the research antibodies

- In-depth analysis of global market trends, featuring historical revenue data for 2020-2022, estimated figures for 2023, as well as forecasts for 2028. This analysis includes projections of Compound Annual Growth Rates (CAGRs) spanning through 2028

- Evaluation of the current market size and revenue growth prospects specific to research antibodies, accompanied by a comprehensive market share analysis categorized by product, clonality, application, major reactivities, host species, end-user, and geographical region

- Discussion on the factors affecting the companies' market shares, the current strategies of antibody companies, the effect of research funding, and the third-party quality evaluation systems of research antibodies

Description of antibody technologies, emerging antibody generation technologies and identification of market drivers, restraints and other forces impacting the global market

- Discussion on technological trends in antibody production and application, and information on antibody-based drug discovery and development process

- Impact analysis of COVID-19 on entire pharma industry and discussion on how COVID-19 is related to pharmaceutical industry's growth slow-down and results in delayed approvals for non-COVID-19-related pharmaceutical/biotech products

- Coverage of new discoveries in biological sciences, rapid technological developments in the IVD industry, new antibody technologies and antibody types, and assessment of antibody-based drug discovery and development

- Discussion on advantages and disadvantages of antibody discovery technologies with examples of antibody production, and information on REpAb technology

- Coverage of FDA and international regulations, details of recent regulatory reforms and list of antibody therapeutics granted in 2018 and insights into government initiatives and funding in emerging markets

- Examination of environmental, social, and corporate governance (ESG) developments, a relevant patent analysis; and merger and acquisitions (M&A), venture fundings, and emerging technologies in the global research antibodies

- Detailed profiles of leading market participants, providing a descriptive overview of their respective businesses, including Abcam Plc, Thermo Fisher Scientific Inc., Cell Signaling Technology Inc., Merck KGaA, Sino Biological Inc., and Bio-Rad

Executive Summary

Summary:

The global market for research antibodies was valued at approximately \$REDACTED billion in 2022. Among product segments, the primary antibody segment accounted for the highest market share in the global market for research antibodies in 2022. The primary antibody segment recorded \$REDACTED billion in revenue in 2022, and this segment is expected to grow at a CAGR of REDACTED% during the forecast period. The high growth rate of this segment is attributed to such factors as demand of antibodies research, the COVID- 19 pandemic, other infectious diseases and an increase in R&D activities by key companies to emerge with new antibodies to counter the global rise in different infectious diseases (e.g., HIV, malaria, dengue). The advancement of biological discoveries will result in the need for more molecular targets to be detected by their antibodies.

Antibodies for each of its many forms of post-translational modifications are needed, even for the same protein molecule. This is likely to propel the growth of the market for research antibodies during the forecast period.

Primary antibodies are used alone or in combination with a secondary antibody. Primary antibodies conjugated to fluorochromes

are used in flow cytometry, whereas in microscopy, a primary-secondary antibody combination is used to increase the signal.

According to the Antibiotic.com, one supplier of antibodies states that primary antibodies can be used against any antigen, including proteins, peptides, carbohydrates and other small molecules. Primary antibodies can also be raised to recognize post-translational modifications, such as phosphorylation, acetylation, methylation and glycosylation. The supplier therefore offers more than REDACTED unconjugated and directly conjugated primary antibodies directed against more than REDACTED targets.

The secondary antibody segment is expected to grow at a CAGR of REDACTED% during the forecast period. A rise in basic or clinical research to detect specific cell or tissue components (antigens), a shorter assay time, an increase in the versatility, antigen signal detection and amplification are likely to fuel the segment's growth in the next few years.

This report segments the global market for research antibodies based on type of antibody, clonality, host, major reactivities, application, end user and region.

Table of Contents:

Table of Contents Chapter 1 Introduction Study Goals and Objectives Reasons for Doing This Study Scope of Report What's New in this Update Methodology Information Sources Geographic Breakdown Segmentation Breakdown Chapter 2 Summary and Highlights Market Overview Market Summary Chapter 3 Market and Technology Background Introduction History and Current State Background of the Antibody and Its Production Current Status and Issues Overview of Antibody Technology Traditional Antibody Generation Technologies Antibody Generation Technologies Antibody Validation Methods Trends in the Market for Research Antibodies **Purchasing Factors Analysis** Third-Party Quality Evaluation Systems **Research Grants** Journal Citations Analysis Technological Trends in Antibody Production and Application **Chapter 4 Research Antibodies** Introduction Enzyme-Linked Immunosorbent Assay/Enzyme-Linked Immunosorbent Spot Direct ELISA

Indirect ELISA **Competitive ELISA** Sandwich ELISA **ELISPOT Assays** FluoroSpot Assays Emerging Technologies or Platforms in ELISA Western Blot **One-Dimensional Gel Electrophoresis Two-Dimensional Gel Electrophoresis** Emerging Technologies and Platforms in Western Blot Immunohistochemistry **Multiplexed Staining** Low-Flexed Staining Flow Cytometry Emerging Technologies/Platforms in Flow Cytometry Immunocytochemistry and Immunofluorescent Staining Chromatin Immunoprecipitation Other Antibody Applications Antibody Arrays Chapter 5 Market Dynamics Market Drivers New Discoveries in Biological Sciences Rapid Technological Developments in the In Vitro Diagnostic Industry New Antibody Technologies and Types Antibody-Based Drug Discovery and Development **Developed and Increasing Research Areas** Increased Government Funding in Emerging Markets Need for Further Human Genomic and Proteomic Research Need for Quality Antibodies in the Current Research Community Need for Antibody Custom Services New Application-Focused Technology Platforms Market Restraints Limited Research Funding Low Validation Technologies **Decline in Suppliers** Decrease in Market Acceptance or Brand Trust Market and Economic Risk Market Opportunities Market Expansion into Emerging Countries **Development of Novel Research Antibodies** Chapter 6 Market Breakdown by Type of Antibody Global Market for Research Antibodies by Type **Primary Antibodies** Secondary Antibodies Chapter 7 Market Breakdown by Clonality Global Market for Research Antibodies by Clonality **Polyclonal Antibodies**

Monoclonal Antibodies **Recombinant Antibodies** Chapter 8 Market Breakdown by Major Reactivity Global Market for Research Antibodies by Major Reactivity Human (Anti-Human) Mouse (Anti-Mouse) Rat (Anti-Rat) Others Chapter 9 Market Breakdown by Application Global Market for Research Antibodies by Application Western Blot Flow Cytometry Immunohistochemistry Immunocytochemistry Immunofluorescent Staining Immunoprecipitation ELISA Chapter 10 Market Breakdown by Host Species Global Market for Research Antibodies by Host Species **Rabbit Host Species Goat Host Species Mouse-Host Species Sheep Host Species Donkey Host Species Other Host Species** Chapter 11 Market Breakdown by End User Global Market for Research Antibodies by End User Universities and Academic Institutions Pharma and Biotech Companies Other End Users Chapter 12 Market Breakdown by Region Global Market for Research Antibodies by Region North America Europe Asia-Pacific Rest of World Chapter 13 Sustainability in the Research Antibodies Industry: An Environment, Social and Governance Sustainability in the Research Importance of Environment, Social and Governance in the Research Antibodies Manufacturing Industry Environment, Social and Governance Ratings and Metrics: Understanding the Data Environmental, Social and Governance Practices in the Research Antibodies Manufacturing Industry **Environmental Performance** Social Performance Governance Performance **Case Studies BCC Research Viewpoint** Chapter 14 Emerging Technology for Antibody Discovery and Generation

Traditional Antibody Discovery and Generation Technologies Animal Plasma Isolation Hybridoma Generation **B** Cell Screening **Display Technologies** Emerging Antibody Discovery and Generation Technologies Emerging Trends in the Antibody Production Technologies Polyclonal Antibody Sequencing Single B Cell Sequencing Machine Learning-Assisted Discovery and Generation Advantages and Disadvantages of Antibody Discovery TechnolOgies Examples of Antibody Production and Technologies **REpAb Technology** Boehringer Ingelheim's Partnership with Company COVID-19 Vaccines by EABR Technology First Therapeutic Antibody Challenges and Future Research Direction Chapter 15 Approved Monoclonal Antibodies, 2018-2023 Chapter 16 M&A and Venture Funding Outlook Mergers and Acquisitions Analysis Merger and Acquisition Deals: 2018-2023 Chapter 17 Competitive Landscape Global Company Market Ranking Distribution of the WHO's International Standard for Anti-SARS-CoV-2 Immunoglobulin Top 100 Antibodies by Major Key Companies **Chapter 18 Company Profiles** ABCAM PLC ABSOLUTE ANTIBODY LTD. AGILENT TECHNOLOGIES INC. **BD BIOSCIENCES BIO-RAD (ABD SEROTEC) BIO-TECHNE** CELL SIGNALING TECHNOLOGY INC. DANAHER JACKSON IMMUNORESEARCH LABORATORIES INC. LONZA MERCK KGAA (SIGMA-MILLIPORE) ROCKLAND IMMUNOCHEMICALS INC. SANTA CRUZ BIOTECHNOLOGY INC. SINO BIOLOGICAL INC. THERMO FISHER SCIENTIFIC INC. UNITED STATES BIOLOGICAL Chapter 19 Appendix: Acronyms



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