

## **Single-cell Omics: Emerging Technologies and Markets**

Market Research Report | 2025-04-04 | 129 pages | BCC Research

### **AVAILABLE LICENSES:**

- Single User License \$4650.00
- 2-5 Users License \$5580.00
- Site License \$6696.00
- Enterprise License \$8035.00

### **Report description:**

Description

Report Scope:

The report highlights the current and future market potential of single-cell genomics and proteomics and a detailed analysis of the market drivers, restraints and opportunities. The report also covers market projections for 2029, including a competitive environment and product analysis. The report provides market estimates and forecasts for single-cell genomics and proteomics based on analysis type, application, end user and region. Based on product type, the market is segmented into single-cell genomics, single-cell epigenomics and single-cell transcriptomics. The market is categorized as academic and research organizations, biopharmaceutical and biotechnology companies, and applied markets and clinical laboratories based on end user. The market is segmented into stem cell biology, oncology, immunology, microbiology and others based on application. The report includes the company profiles of the key players with detailed information about their business segments, financials, product portfolios and recent developments. By geography, the market has been organized into North America, Europe, Asia-Pacific and the Rest of the World (RoW). The North American region includes countries such as the U.S., Canada and Mexico. Europe includes Germany, the UK, Italy, France, Spain and the rest of Europe; Asia-Pacific includes countries such as China, Japan, India, Australia, South Korea and the rest of Asia-Pacific. The Rest of the World includes South America and the Middle East and Africa. For market estimates, data has been provided for 2021 and 2022 as the historic years, 2023 as the base year, and forecast for 2029.

Report Includes:

- 43 data tables and 59 additional tables
- An overview of the global markets and emerging technologies for single-cell genomics and proteomics
- Analyses of the global market trends, with data from 2021-2023, estimates for 2024, and projections of compound annual

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scott-international.com](mailto:support@scott-international.com)

[www.scott-international.com](http://www.scott-international.com)

growth rates (CAGRs) through 2029

- Evaluation of and forecast for the overall market for single-cell genomics and proteomics, and quantification of the market potential by analysis type, application, end user and region
- Description of cell isolation technologies, including flow cytometry, laser capture microscopy and micromanipulation, and sample preparation technologies, including microfluidics and whole genome amplification/pre-amplification
- Coverage of NGS, qPCR/PCR, microarrays, mass spectrometry and microfluidics
- Discussion of the major market dynamics and shifts, and the regulations, industry challenges, and macroeconomic factors that will affect the single-cell genomics and proteomics market over the coming years
- Review of the patent filings and research publications for innovations in single-cell genomics and proteomics technology
- A discussion of the industry's ESG challenges and practices
- Identification of the companies that are best positioned to meet this demand because of their proprietary technologies, strategic alliances, or other advantages
- Insight into industry structure, competitive landscape, clinical trials and ongoing research activity
- Profiles of the major players, including 10x Genomics, Thermo Fisher Scientific Inc., Illumina Inc., BD and Merck KGaA

## Executive Summary

### Summary:

The global market for single-cell genomics and proteomics is expected to grow from \$4.0 billion in 2024 to reach \$9.1 billion by the end of 2029, at a compound annual growth rate (CAGR) of 17.6% from 2024 through 2029.

The demand for single-cell genomics and proteomics is rapidly increasing across global research and healthcare markets, driven by advances in single-cell analysis technologies and their ability to provide unprecedented insights into cellular heterogeneity. With the rising focus on personalized medicine, oncology and immune profiling, single-cell technologies are becoming indispensable tools for identifying biomarkers, understanding disease mechanisms and developing targeted therapies.

The growing prevalence of chronic and complex diseases, such as cancer, neurodegenerative disorders and autoimmune diseases, has highlighted the importance of single-cell approaches in precision medicine. These technologies enable researchers to study individual cells at genomic and proteomic levels, uncovering critical information that bulk analysis often misses. The significant investments in single-cell research, coupled with ongoing technological innovations in sequencing, mass spectrometry and data analysis platforms, are fueling the adoption of single-cell genomics and proteomics. Increasing collaborations between academic institutions, biotech companies, and healthcare providers are further accelerating the development and commercialization of single-cell technologies. Comprehensive market sizing and forecasting will enable stakeholders to identify high-growth segments and regions, understand competitive dynamics and make informed decisions for strategic planning during the forecast period.

## Table of Contents:

Table of Contents
Chapter 1 Executive Summary
Market Outlook
Scope of Report
Market Summary
Chapter 2 Market Overview
Overview

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

Technology Background  
Types of Omics  
Technological Infrastructure and Data Integration  
Macroeconomic Factors Analysis  
Impact of Ongoing Russia-Ukraine War on the Single-cell Genomics and Proteomics Market  
Economic Uncertainty and Research Funding Cuts  
Increased Operational Costs  
Shift in Geopolitical Collaborations  
Sanctions on Russia and Technology Exports  
Porter's Five Forces Analysis  
Bargaining Power of Buyers  
Bargaining Power of Suppliers  
Potential of New Entrants  
Competition in the Industry  
Threat of Substitutes  
Chapter 3 Regulatory Landscape  
Regulatory Overview  
Market Regulations by Country/Region  
Federal Regulation  
CMS Regulation  
FDA Regulation  
FTC Regulation  
Canada  
European Union  
United Kingdom (U.K.)  
China  
Japan  
Australia  
International Standards and Guidelines  
Chapter 4 Market Dynamics  
Market Dynamics  
Market Drivers  
Increasing Investment and Funding for Single-cell Genomics and Proteomics Research Activities  
Growing Prevalence of Cancer Generating Demand for Personalized Treatments  
Promising Applications of Single-cell Genomics and Proteomics in the Drug Development Process  
Market Restraints  
High Costs Associated with Single-cell Proteomics  
Technical Challenges  
Market Opportunities  
Technological Advances and Automation in Single-cell Studies  
Collaboration and Partnerships  
Chapter 5 Emerging Technologies and Developments  
Artificial Intelligence in Single-cell Genomics and Proteomics  
Companies in the AI Single-cell Genomics and Proteomics Market  
Advances in Single-cell Omics and Multi-omics  
Chapter 6 Market Segmentation Analysis  
Market Overview

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

Segmentation Breakdown  
Global Single-cell Genomics and Proteomics Market by Analysis Type  
Single-cell Genomics  
Single-cell Proteomics  
Single-cell Transcriptomics  
Single-cell Epigenomics  
Global Single-cell Genomics and Proteomics Market by Application  
Oncology  
Stem Cell Biology  
Immunology  
Other Applications  
Global Single-cell Genomics and Proteomics Market by End User  
Academic and Research Organizations  
Biopharmaceutical and Biotechnology Companies  
Clinical Laboratories  
Applied Markets  
Geographic Breakdown  
Global Single-cell Genomics and Proteomics Market by Region  
North America  
Europe  
Asia-Pacific  
Rest of the World  
Chapter 7 Competitive Intelligence  
Overview  
Top Players Ranking  
Key Strategies Adopted by Players  
Collaborations and Partnerships  
New Product Launches  
Expansions and Investments  
Mergers and Acquisitions  
Patent Analysis  
Takeaways  
Chapter 8 Sustainability in the Genomics and Proteomics Market: ESG Perspective  
Introduction to ESG  
ESG Performance in the Market  
ESG Practices in the Genomics and Proteomics Industry  
Environmental Performance  
Social Performance  
Governance Performance  
ESG Risk Ratings  
Concluding Remarks from BCC Research  
Chapter 9 Appendix  
Methodology  
Abbreviations  
Company Profiles  
10X GENOMICS  
AGILENT TECHNOLOGIES INC.

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

BD  
BIO-RAD LABORATORIES INC.  
BIO-TECHNE  
BRUKER  
F. HOFFMANN-LA ROCHE LTD.  
ILLUMINA INC.  
MERCK KGAA  
PROMEGA CORP.  
QIAGEN  
SARTORIUS AG  
STANDARD BIOTOOLS  
TECAN TRADING AG  
THERMO FISHER SCIENTIFIC INC.

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

**Single-cell Omics: Emerging Technologies and Markets**

Market Research Report | 2025-04-04 | 129 pages | BCC Research

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	\$4650.00
	2-5 Users License	\$5580.00
	Site License	\$6696.00
	Enterprise License	\$8035.00
		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



**Scotts International. EU Vat number: PL 6772247784**

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

[www.scotts-international.com](http://www.scotts-international.com)