

High-Throughput and Advanced Technologies to Streamline Biologics Discovery Simplifying Progress

SARTURIUS

Transform Biologics Discovery with Innovative Technologies and Tools

Gain More Insights, Make Better Decisions

Therapeutic antibodies have recently emerged as one of the most successful strategies for the treatment of both hematologic cancers and solid tumors. Because they offer the promise of better specificity and safety than many other cancer treatments, this class of biologics is projected to continue increasing in importance.

Accelerate Your Antibody Development with Peace of Mind

For development of breakthrough therapeutics you need revolutionary technologies providing rapid, multifactorial results to enable deeper insights and ensure the choice, quality, and integrity of your biopharmaceutical product.











Ensure Confidence in Your Biotherapeutic, from Molecule to Market



More Insight Through Complete Cellular and Molecular Interaction Analysis Studies



Better Reproducibility with Orthogonal Assays and Integrated Data Acquisition



Higher Confidence in Quality, Purity, and Integrity of Your Product



Increase Productivity by Streamlining the Discovery and Development Workflow

Cell and Protein Analysis Platforms for Tracking Complex Biological Processes

The CellCelector Automated Cell Imaging and Picking Platform, Incucyte® Live-Cell Analysis, iQue® Advanced Flow Cytometry, and Octet® Label-Free Analysis systems offer unique, high-capacity cell and protein analysis solutions for characterizing cell phenotype and function and tracking complex biological processes.

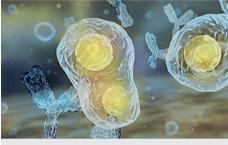
Legend: CellCelector iQue° Incucyte° Octet°



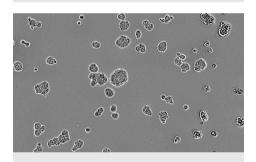
Antibody Library Screening Increase data throughput and quality by multiplexing antibody binding, specificity, and species cross reactivity.



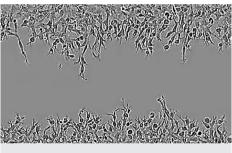
Functional Profiling
Easily go from high-content
functional assays to actionable
information that helps you
select candidates with desirable
biological activity.



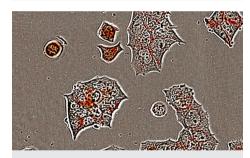
Cell Line Development
Select antibody producing clones upstream of cell line development by simultaneously detecting IgG titer, cell health, and viability.



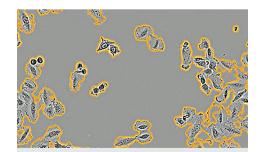
3D Tumor Spheroid AssaysTrack and quantify tumor spheroid formation, growth, and death in real time.



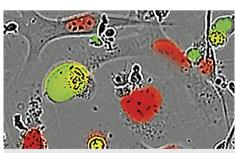
Cell Migration and InvasionMonitor and analyze migration and invasion with or without a chemotactic gradient.



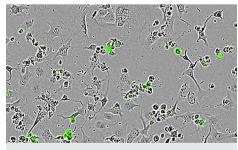
Antibody Internalization
Quantify antibody internalization in
96- or 384-well formats.



Proliferation
Measure cell proliferation in monoor co-cultures, with or without
labels.



ApoptosisInvestigate aberrations in apoptotic pathways in intact, living cells.



Cytotoxicity
Detect real-time measurements of cell death based on cell membrane integrity.

Find out more

For more information, please visit www.sartorius.com/biologics

Complete with comprehensive analysis and visualization capabilities, our platforms will empower you with actionable results, faster!

Solutions and Services for Molecule Development

iQue® Advanced Flow Cytometry Platform— Multiparametric and Actionable Results for More Insight

A high-throughput, suspension cell and bead-based analysis platform for antibody screening and functional profiling. The fastest way to generate high content data from small sample volumes.

- Screen your libraries in days, not months
- $\,\blacksquare\,$ Sample volumes as low as 1 μ L, reduce reagent costs
- Screen cells in suspension and targets in their natural conformation

See specific applications in "Cell and Protein Analysis Platforms" section.



Incucyte® Live-Cell Analysis System— See What Your Cells Are Doing and When

Enable real-time, live-cell imaging and analysis directly inside your incubator.

- Use with non-perturbing Incucyte* reagents to detect dynamic biological changes
- Measure kinetic effects of your antibody treatment on target cells
- Accommodates multiple users and applications in parallel

See specific applications in "Cell and Protein Analysis Platforms" section.



Octet® Bio-Layer Interferometry (BLI) and Surface Plasmon Resonance (SPR) Systems for Label-Free Detection — Perform Protein Quantitation, Screening and Kinetic Characterization Assays

Measure molecular interactions in real-time without the need for detection reagents and enable advanced, fast, and direct detection of specific biomolecules. Rapidly determine binding kinetics, product titer, screen for specific glycosylation content and other critical quality attributes (CQAs) perform off-rate analysis to select optimal clones using both purified and unpurified samples.



CellCelector Automated Cell Imaging and Retrieval Platform — Select and Screen Single Cells for Antibody Discovery

- High-throughput single plasma B-Cell and Hybridoma clone screening for antibody discovery
- Massively parallel co-cultivation of different cell types for functional studies
- Rare single cell detection and isolation



Molecule Development Workflow



Target Identification

Multiparametric and actionable results for more insight and better decisions



Library Screening

Screen whole-cell binding hybridoma, single B-Cells or phage library to identify positive hits



Hit Confirmation

Confirm hits in kinetic binding assays



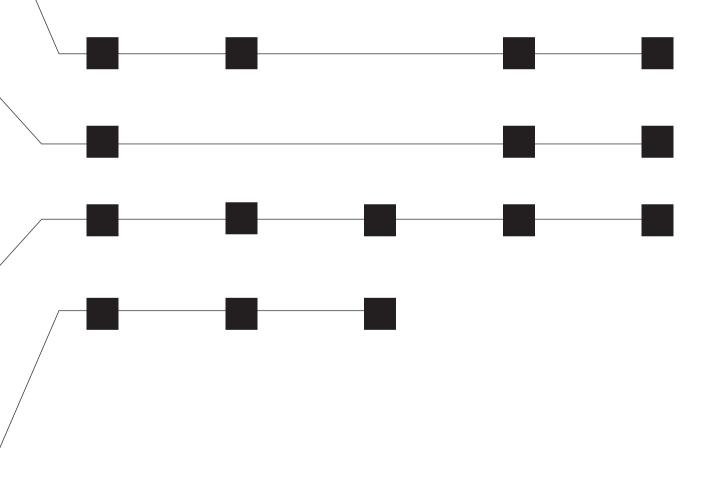
Lead Optimization

Assess and optimize the properties of lead antibodies



Candidate Characterization

Analyze the structural properties of the lead antibodies as well as binding and functional properties



For more information, please visit www.sartorius.com/biologics

Everyday Lab Essentials

Sartorius' lab essentials help streamline routine and repetitive tasks and achieve more accurate results by:



Increasing reproducibility of your results



Avoiding contamination in your processes



Increasing safety and reduce fatigue with ergonomic and easy-to-use products

Pipetting



Picus® 2 Electronic Pipettes
The next generation of Bluetooth
connectivity, unbeatable ergonomics, a
variety of pipetting modes, and
repeatable results.



Midi Plus Pipette Controllers Lightweight, easy-to-use pipette controllers for large volumes applications.

Standard and Buffer Preparation



Cubis® Dosing System
Semi-automatic preparation and documentation of highly reproducible calibration standards for chromatography and spectroscopy.

Lab Weighing



Cubis® II Laboratory Balances
With 100% configurable hardware,
software and connectivity, Cubis® II
offers a high-performance balance that
will align with your unique demands.

Lab Water Systems



Arium® Type 1 Ultrapure Water
Systems

ASTM Type 1 water, as well as RNase/ DNase and endotoxin-free water, to ensure consistent, high-quality results.

Mycoplasma Detection



Microsart® Mycoplasma qPCR kits Keep your cell cultures contaminantfree and compliant.

Clarification, Concentration and Purification of Proteins



Sartoclear Dynamics® Lab and Sartolab® RF | BT Vacuum Filtration Units



Vivaspin® and Vivaflow® Ultrafiltration Devices



Vivapure® and Sartobind® Membrane Adsorbers



Minisart® Syringe Filters

Lab Instrument Services

Sartorius' certified and accredited services ensure the quality of results, guarantee equipment longevity, and reduce downtime.

- Installation and Commissioning
- Qualification IQ | OQ
- Training
- Software Updates | Upgrades
- Maintenance and Service Agreements
- Calibration



Germany

Sartorius Lab Instruments GmbH & Co. KG Otto-Brenner-Strasse 20 37079 Goettingen Phone +49 551 308 0

For further information, visit www.sartorius.com/biologics

USA

Sartorius Corporation 565 Johnson Avenue Bohemia, NY 11716 Phone +1 631 254 4249 Toll-free +1 800 635 2906