



iQue® 3

Faster, Smarter
Flow Cytometry

Simplifying Progress

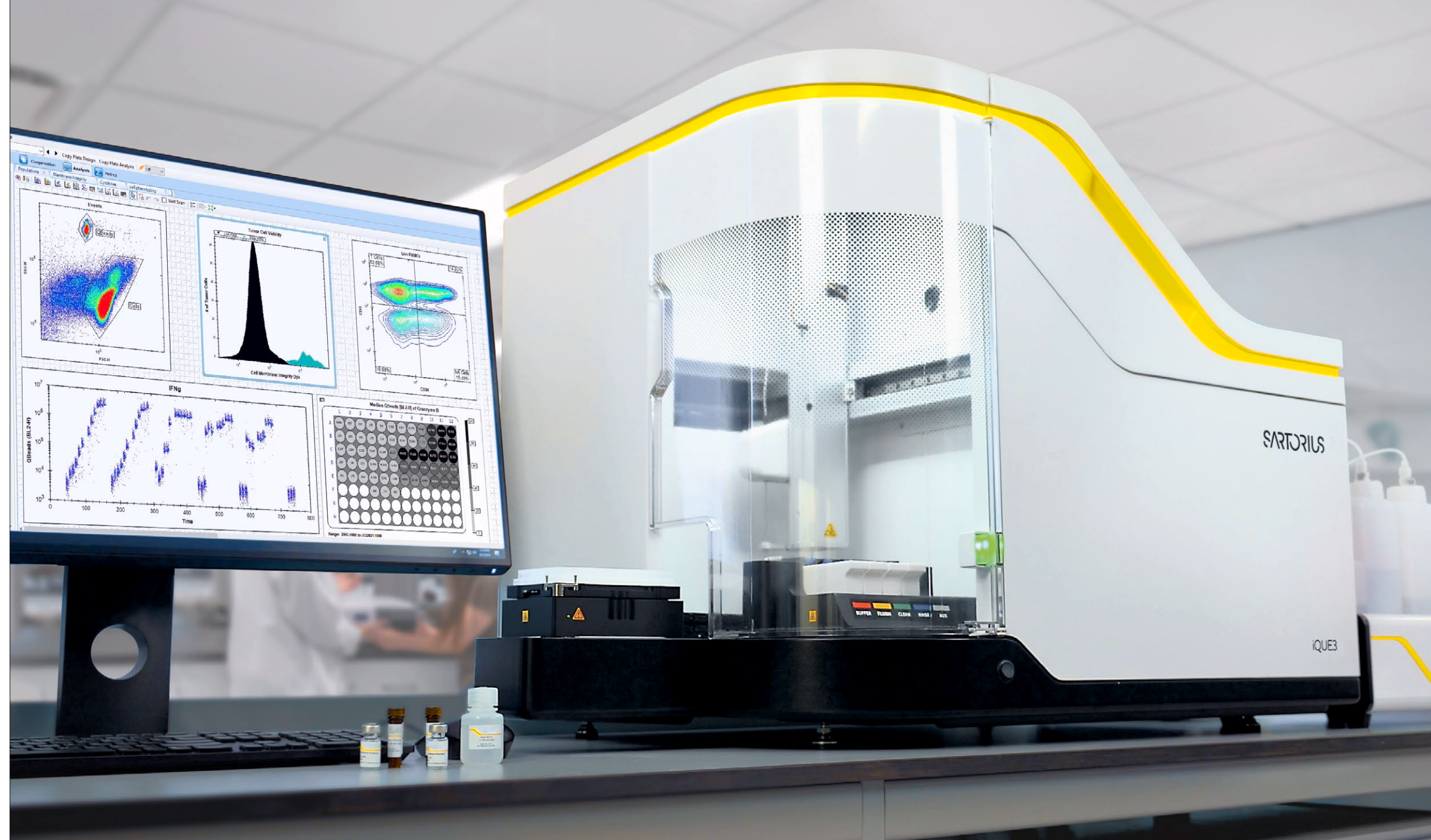
SARTORIUS

Advanced High Throughput Flow Cytometry Solution Speeds Up Your Entire Workflow

Whether you are discovering a new therapeutic antibody, developing a specific checkpoint inhibitor or evaluating CART cell function, driving your research forward hinges on the ability to rapidly evaluate more samples in a biologically relevant, reproducible, and cost-effective way.

Meet the iQue® 3. The most advanced flow cytometry platform with a focus on speed from setup, to acquisition, and analysis. To get you from samples to actionable results in record time. The iQue® 3 combines a patented sampling method, which allows for the fastest sample acquisition in the industry. It has the ability to handle 96, 384, or 1536-well plates, and enables continuous plate loading through connection with any automation system.

Don't simply move the bottleneck to spending days on data analysis as with other systems. Speed up your entire workflow by upgrading your flow cytometry experiments on the iQue® 3.



Speed

Relieve capacity bottlenecks throughout your entire experiment with the fastest plate sampling, integrated analysis, and novel data reduction tools.



Miniaturization

Conserve precious samples and reagents by sampling as little as a single microliter from miniaturized assay volumes.



Content

Generate more biologically relevant data through simultaneous measurement of phenotypes and cytokines in the same well.



Usability

Enjoy a simple, scalable, multi-user environment with walkaway automation features including 48 hour uninterrupted run times and automated QC bead vortexing on-board.



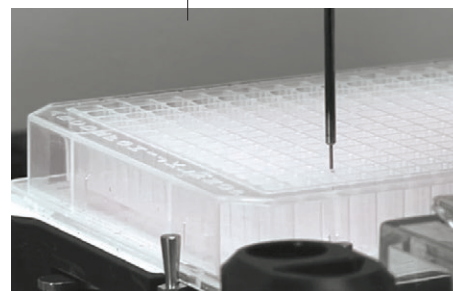
Insight

Dramatically reduce time to decision with novel visualizations that facilitate the fastest path to actionable results, even from complex data sets.

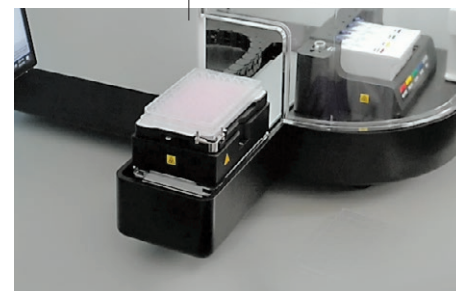
The iQue® 3: Built to Accelerate Your Research

With unique sample-handling features, intelligent processing, and automated template-based analysis, the iQue® 3 gets you from samples to actionable results faster than ever before.

- The iQue® 3 is a simple, scalable, multi-user environment featuring walkaway automation, comprehensive analysis and visualization tools that are not available in traditional flow cytometers.
- Walk up and use operation eliminates the need for pre-analytical user setup and power users.
- Patented, rapid microvolume sampling processes 96-well plates in as few as 5 minutes or 384-well plates in 20 minutes.
- The iQue® 3 comes in flexible plate formats and is suitable for a broad range of cell and bead-based analyses.



Minimal volume sampling capabilities, as little as 1 μ L, conserve samples and reagent costs.



Robotic integration capabilities enable high throughput applications.



Onboard vortexing just prior to sampling ensures proper resuspension and delivers improved QC results and consistency.



Extended run time on cartridges allows for unattended multiple plate processing. Liquid level detection and user-definable low-level warnings help ensure there are always enough reagents to complete planned runs.

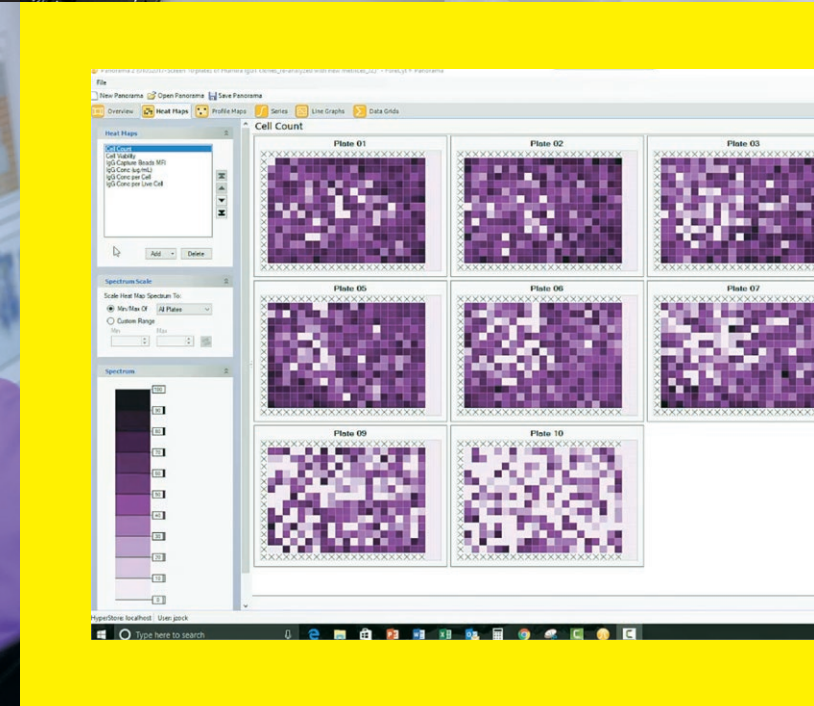
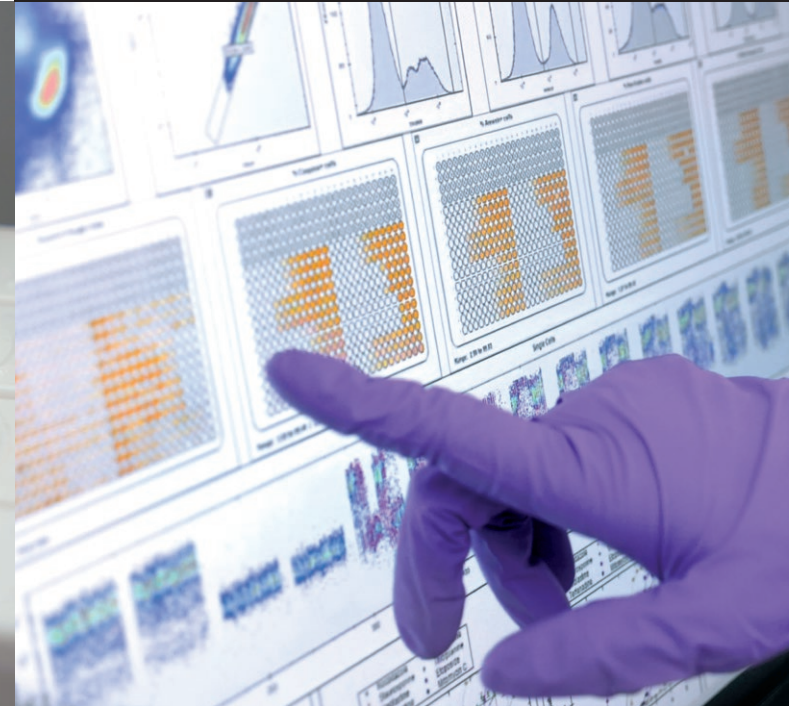
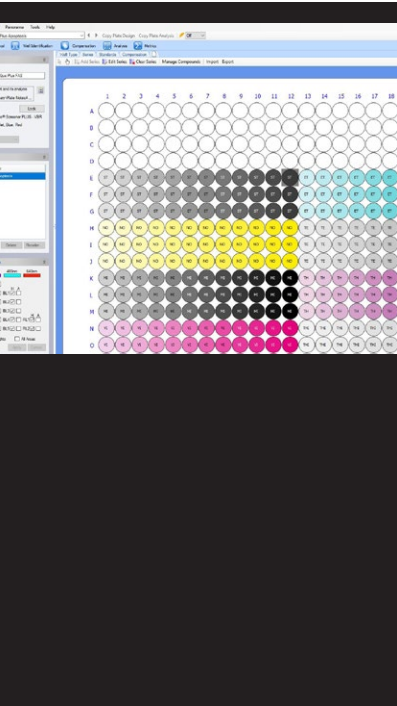
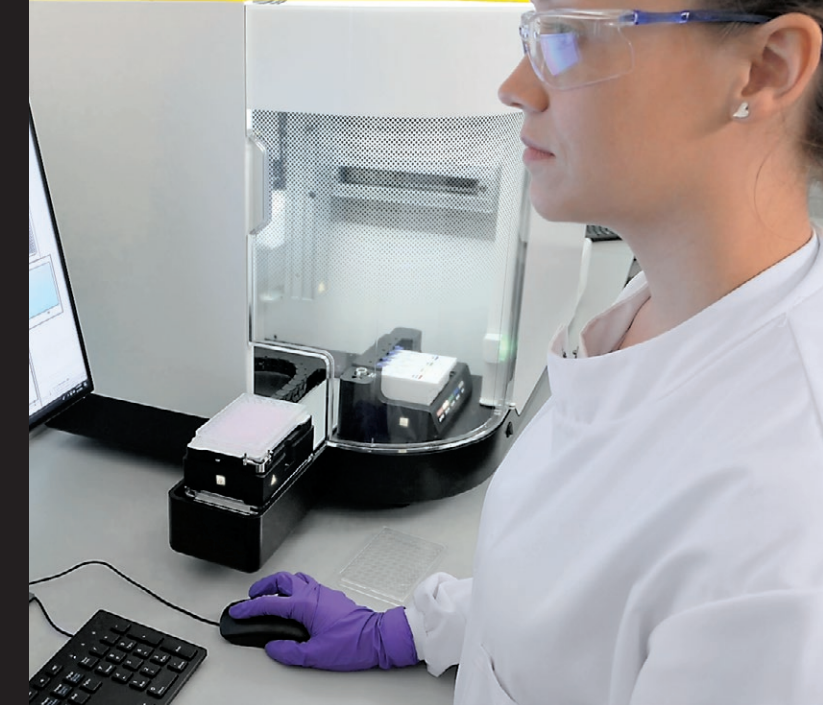


Samples are delivered to detectors in an air-gap delimited stream as part of a patented, rapid microvolume sampling process.

The iQue® 3: Get to Your Destination Faster

The iQue® 3 comes in multiple optical configurations and flexible plate formats to match the diverse needs of researchers. The platform delivers a consistent process that translates into time and resource savings, with additional options like robotic integration, increased fluidic capacity, and centralized data storage that further extend productivity.

An Integrated Solution
That Supports You Through
the Entire Workflow



1. Simple Assay Setup

- Optimized mix-and-read reagent kits with ready-to-use analysis templates
- Flexible fluorophore options with up to 3 laser excitation and 13 color emission channels
- No adjustment optics for scalable, reliable, and reproducible data collection in multi-user environments

2. Intelligent Hardware Integration

- Enhanced rinse station with intelligent software reporting of cartridge levels
- Patented sampling technology processes 96 wells in as little as 5 minutes; 384 wells in 20 minutes
- Automated plate calibration, QC, detector cleaning and shut down

3. Real-Time Data Acquisition and Analysis

- Single-software solution for all your acquisition and analysis needs
- Rapid data visualization—adjust a gate to see updated plate-wide analysis in real time
- Guided creation of metrics, statistics, visualizations and reports

4. Dynamic Visualization of Results

- Easily identify wells of interest using multiple selection criteria
- Compare, identify, and rank wells in all plates across your experiment
- Drill down from experiment level, to plate level, to well level, to cell level

The Enhanced Rinse Station (ERS): Improved, Intelligent Fluidics for More User-Friendly Operation

The iQue® 3 features an enhanced rinse station that actively monitors buffer usage with built-in liquid level detection performed by load cells under each cartridge and offers a smarter way to ensure you always have enough buffers to complete your run.

- 48 hour run time before replacing reagent cartridges
- Extended run time on cartridges for unattended multiple plate processing
- Intelligent software monitoring of rinse station fluid levels
- Improved reagent cartridges with less evaporation and the ability to easily close and store if needed



Reagent Cartridges

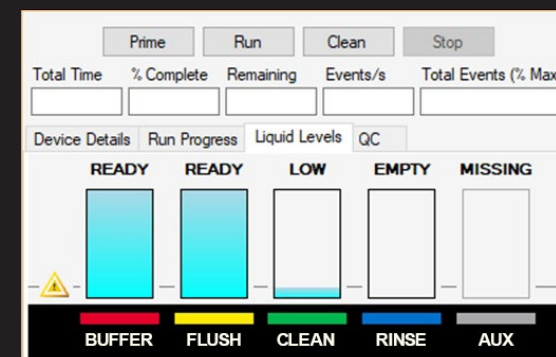
- Double the volume and run time of previous reagent troughs
- Easily resealable with cap closure for storage if needed
- Simple to install and replace

Forecyt® Software

- Through integration with Forecyt® software, the ERS minimizes the chances of failed runs due to insufficient reagent levels.
- Intelligent reagent level reporting based on cartridge weight
- User definable low level reminder
- Low level warnings

Improved Usability with the Enhanced Rinse Station

- Automated vortexing just prior to sampling for improved QC results and consistency
- Routine tasks performed with the touch of a button, including system cleaning, plate map calibration, shutdown, and even fluidics refilling with the Qmax Refill Module
- Warnings for missing, low, and even user defined volume levels



Forecyt® Software: Actionable Results, Faster

One of the key features of the iQue® 3 platform is the Forecyt® Software, which delivers a fully integrated experience, from data acquisition to plate-level analytics and multi-parametric data visualization.



Acquire

- Annotate plate wells for downstream analysis
- Select channels and define sampling, washing, and cleaning routines
- Apply analysis templates for instantaneous multi-plate processing



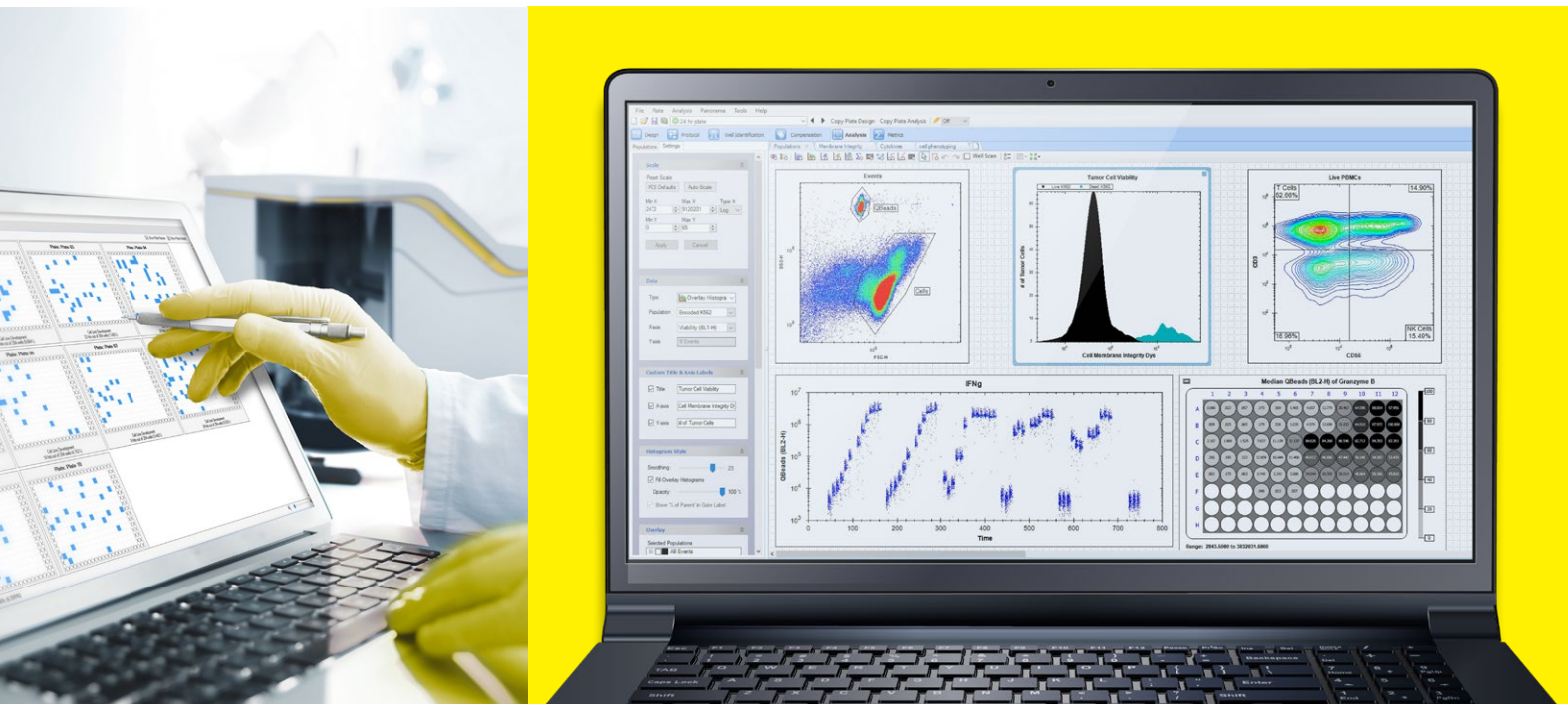
Analyze

- Intuitive workflow with plate visualizations including heat maps, whole plate views, dose response, and standard curves
- Interactive gating with real-time results
- Easy report generation and data export

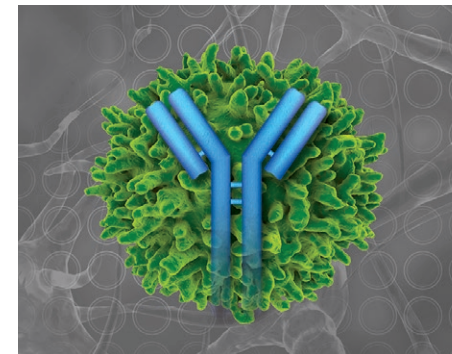


Visualize

- Link visualizations together to rapidly interrogate results
- Locate wells and arrays of interest
- Compare, identify, and rank wells across your entire experiment

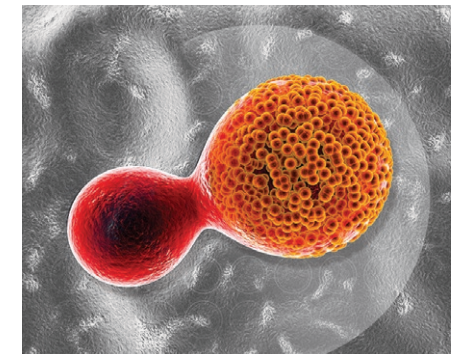


Applications for the iQue® 3



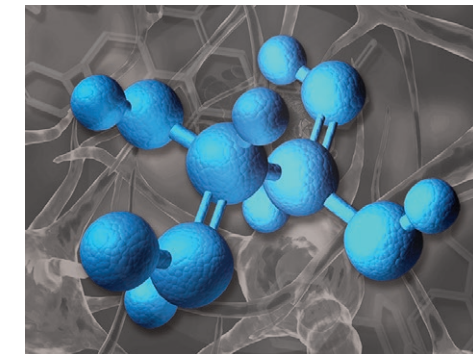
Antibody Discovery and Development

- Increase data throughput and quality by multiplexing antibody binding, function, and titer across the process.
- Antibody screening
- Functional profiling
- Cell line development



Adoptive Cell Therapy

- Assess multiple cell parameters faster, with fewer cells and less reagents.
- Immune cell killing
- Immune cell assessment
- Cytokine profiling



Small Molecule Screening

- Perform high-content phenotypic screening of immune biology across the drug discovery process.
- Primary immune cell screening
- Yeast and bacterial assays
- Target identification with siRNA and CRISPR

Mix-and-Read Screening Kits for Cellular Phenotype and Function Applications

iQue® kits include optimized reagents that are validated on the iQue® 3 platforms, with flexible formats. No- or one-wash protocols save time, reduce variability, and allow for miniaturization. Kits can be multiplexed to increase assay content and reduce sample requirements.

To view a complete listing of our reagents and consumables visit: www.intellicyt.com/reagents

Bead-Based Kits

- Qbeads® Plexscreen
 - Human Secreted Proteins
 - Mouse Secreted Proteins
 - Rat Secreted Proteins
 - Qbeads Human Inflammation Panel

Qbeads® Devscreen

- SA (Streptavidin)
- SH (Sulfhydryl)

Qpanels® T Helper Kits

- Th1/2 4-plex
- Th1/2 6-plex
- Th1/2 9-plex
- Th1/2/17 7-plex

Cell-Based Kits

- Cell Assay Kits
 - Cell Cycle
 - 4-Plex Apoptosis
 - Singleplex Apoptosis (mix and match)
 - Cell Membrane Integrity
 - Cell Proliferation and Encoding
 - Antibody Internalization Kits and Reagents (human and mouse)

Cell and Bead-Based Kits

- Cell Line Development
 - Cy-Clone™ PLUS
- Antibody Screening
 - Mouse IgG Type and Titer
- Immune Cell Characterization
 - T Cell Activation
 - T Cell Memory
 - T Cell Exhaustion
 - Mouse T Cell Biology
 - Immune Cell Killing

Forecyt® Software is Available in Three Configurations— Scalable to Meet Your Growing Needs:

	Number of Computers	Number of Instruments	Number of Users	Distributed Client Access
<p>Standard Edition—a standalone solution that comes with each instrument— can be used to set up experiments, acquire data and analyze results on the PC attached to the instrument.</p>	One	One	Single	No
<p>The Offline Edition is ideal for users who want to analyze data away from the laboratory, without a network connection.</p>	One	None	Single	No
<p>The Enterprise Edition is a secure multi-user, multi-instrument data storage and management solution that provides distributed access to remote analysis capabilities.</p>	Many*	Many*	Multiple*	Yes

iQue® 3: The Complete Solution for Faster, Smarter Flow Cytometry

Ordering Information

	Lasers	Channels	Plate Formats	Cat. No.
iQue® 3 110V Blue-Red Configuration	2	8	96, 384	91375
iQue® 3 HD 110V Blue-Red Configuration	2	8	384, 1536	91381
iQue® 3 110V Violet-Blue-Red Configuration	3	15	96, 384	91377
iQue® 3 110V Violet-Yellow-Blue Configuration	3	15	96, 384	91379

Optional Products

	Cat. No.
Forecyt® Enterprise Edition with 5 Floating Client Licenses	91131
Robotic Integration API License	90208
Qmax Refill Module	91309

Visit shop.intellicyt.com
to find and order:

- Solutions, bottles, reservoirs, and cartridges
- iQue® 3 accessories
- Qmax and Qsol refill modules and buffers
- Beads, plates, probes, and tubing

Sales and Service Contacts

For further contacts, visit
www.sartorius.com

Essen BioScience, A Sartorius Company

www.sartorius.com/intellicyt

E-Mail: info.intellicyt@sartorius.com



North America

Essen BioScience Inc.
300 West Morgan Road
Ann Arbor, Michigan, 48108
USA
Telephone +1 734 769 1600

Europe

Essen BioScience Ltd.
Units 2 & 3 The Quadrant
Newark Close
Royston Hertfordshire
SG8 5HL
United Kingdom
Telephone +44 (0) 1763 227400

APAC

Essen BioScience K.K.
4th Floor Daiwa Shinagawa
North Bldg.
1-8-11 Kita-Shinagawa
Shinagawa-ku, Tokyo
140-0001
Japan
Telephone +81 3 6478 5202