

iQue® 3

Truly Fast.
Simply Effortless.

High-Throughput Screening
(HTS) by Cytometry

Simplifying Progress

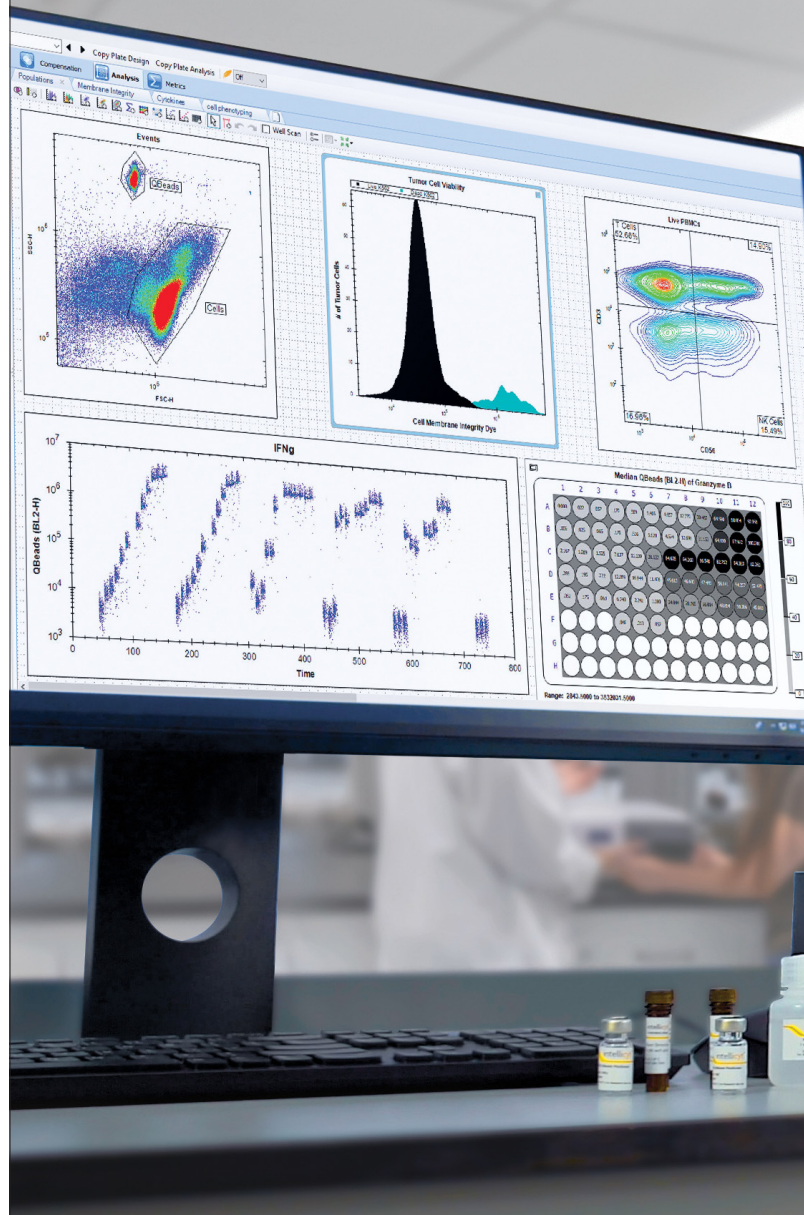
SARTORIUS

iQue® HTS Cytometry: Screen a 96-Well Plate in 5 Minutes

Speed and throughput are essential in cell analysis workflows. Whether it is screening of therapeutic antibodies or evaluating chimeric antigen receptor (CAR) T cell function, progress depends on the rapid evaluation of samples in a way that is biologically relevant, reproducible, and cost-effective.


The iQue® 3 HTS Cytometer is designed to be a data generation powerhouse in high-throughput screening workflows. With a focus on speed and ease of use from setup to acquisition and analysis, it delivers high quality results in the time it takes to enjoy a coffee break.

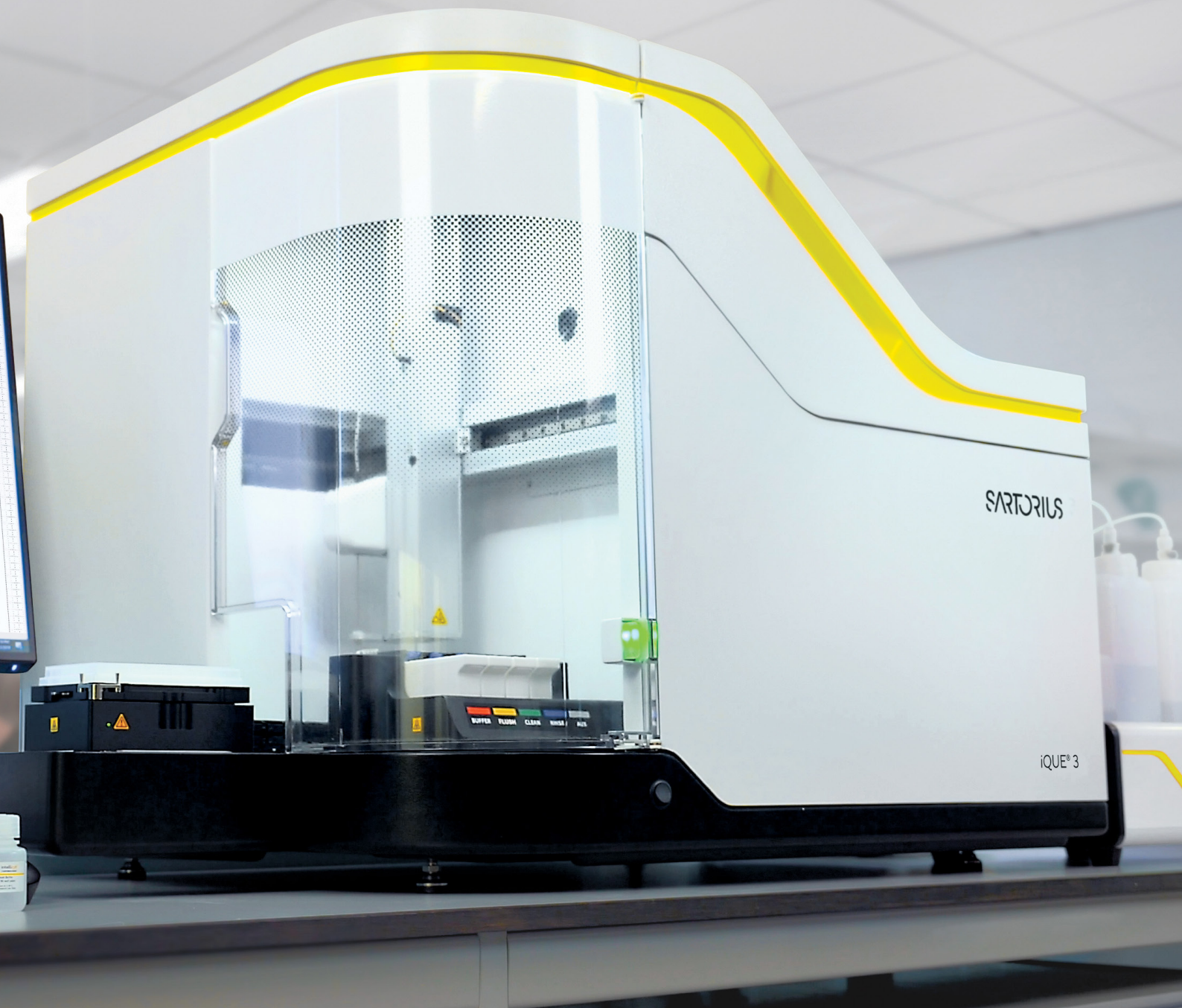
Featuring a patented sampling method, the iQue® 3 allows for the fastest sample acquisition in the industry. It accommodates 96-, 384-, or 1536-well plates, and enables continuous plate loading through integration with any automation system.



Screening

Run high-throughput screens and generate more biologically relevant data with simultaneous analysis of phenotype and cytokines in every well.

 Find out more
For more information, please visit
www.sartorius.com/iQue-products



Speed

Relieve capacity bottlenecks throughout your entire workflow 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.



Ease of Use

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



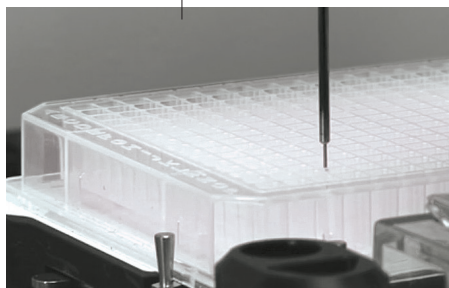
Automation Ready

Take advantage of the open platform design for integration with popular robotic systems to load | remove plates and initiate runs.

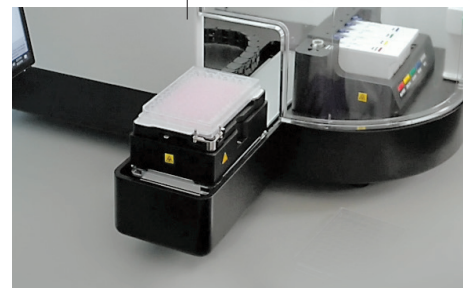
The iQue® 3: Now You Can Leave the Lab on Time

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 setup and reduces reliance on '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.



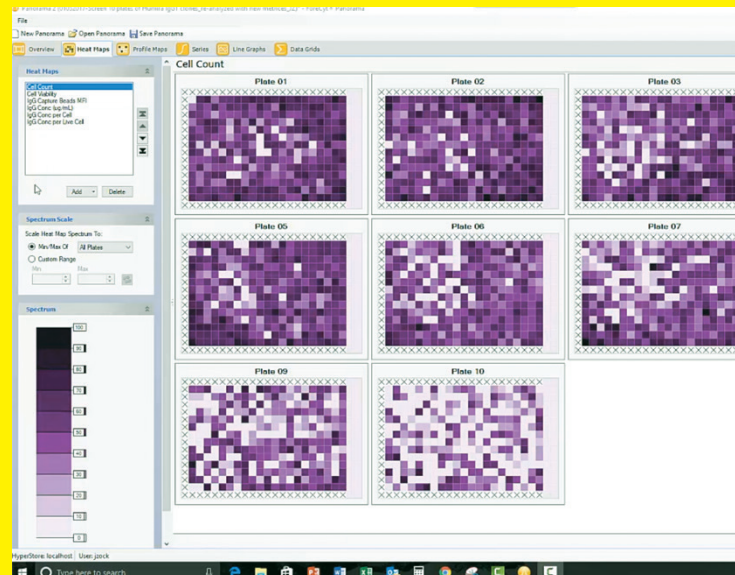
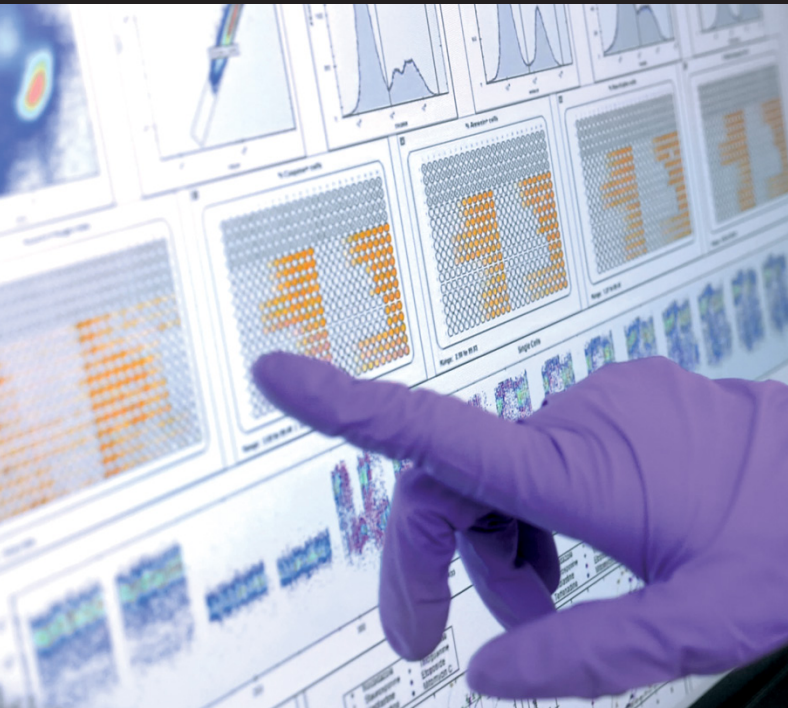
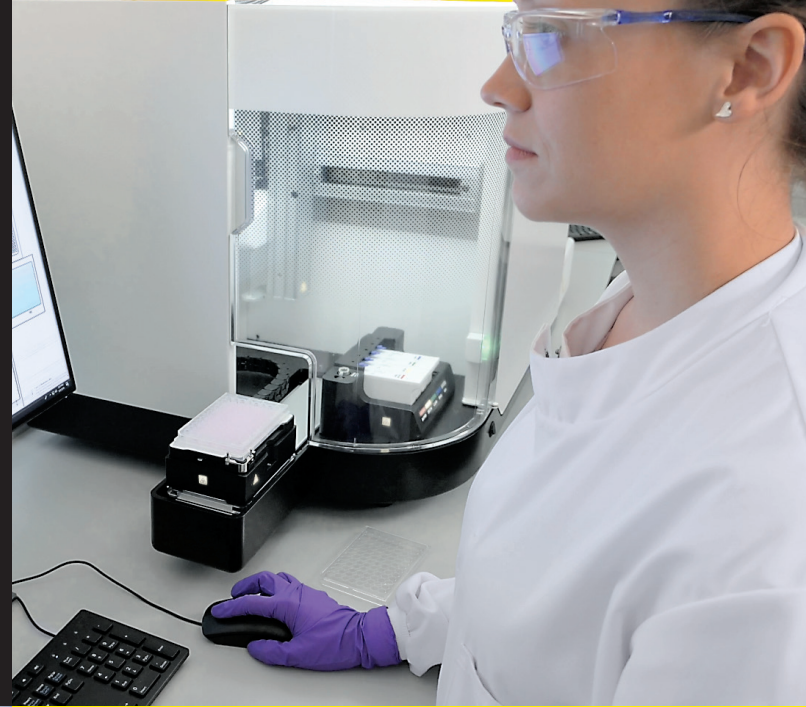
1. Simple Assay Setup

- 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

An Integrated Solution
That Supports You Through
the Entire Workflow



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

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

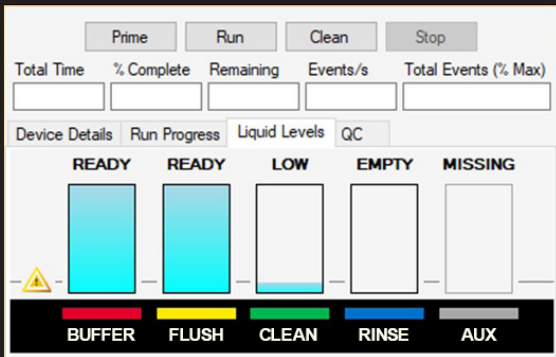


Reagent Cartridges

- 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



Forecyt® Software: What Easy Analysis Looks Like

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



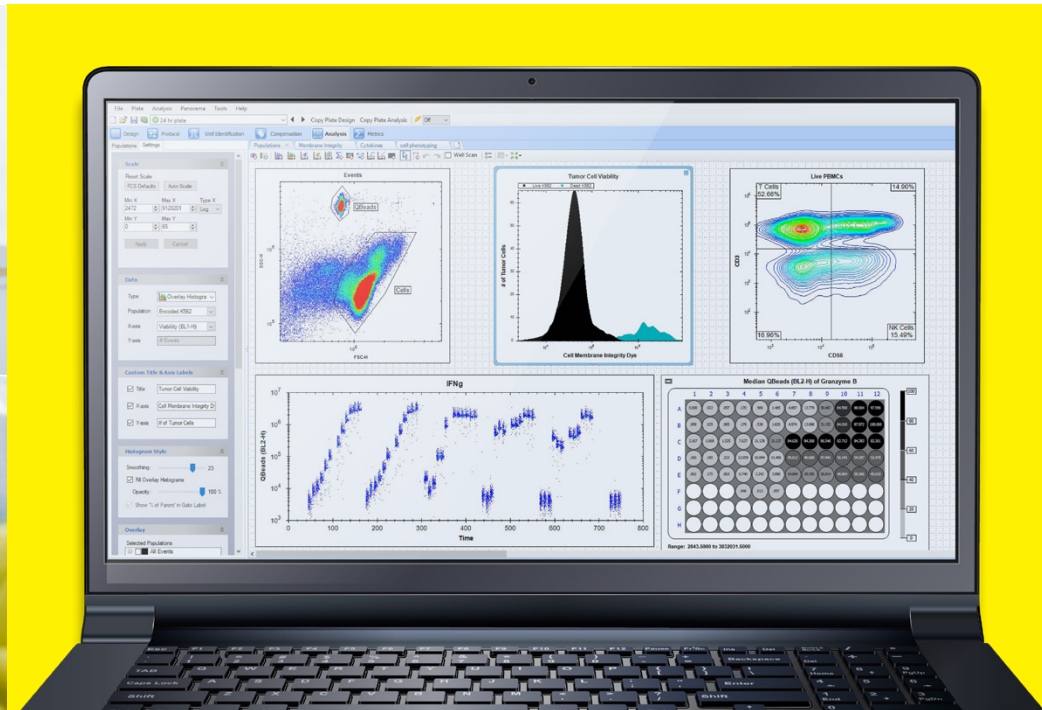
Analyze

- 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

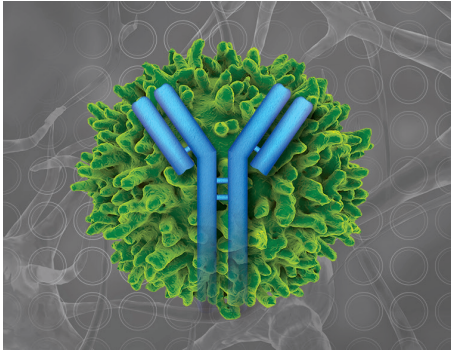
- Link visualizations together to rapidly interrogate results
- Locate wells and arrays of interest
- Compare, identify, and rank wells across your entire experiment



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

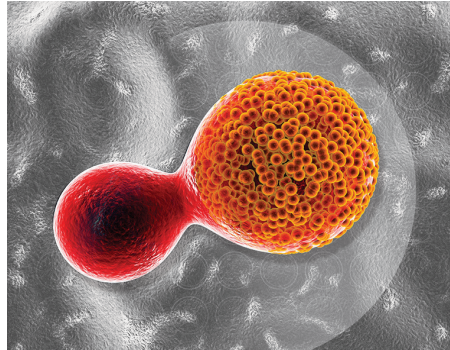
	Number of Computers	Number of Instruments	Number of Users	Distributed Client Access
 <p>Standard Edition—a standalone solution that comes with each instrument— can be used to set up experiments, acquire data and analyze results on the PC attached to the instrument.</p>	One	One	Single	No
 <p>The Offline 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

Applications for the iQue® 3



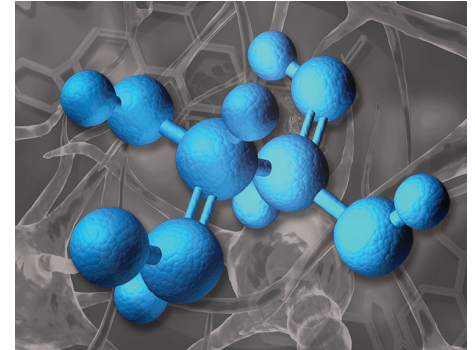
Antibody Discovery and Development

- 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:

<https://www.sartorius.com/en/products/flow-cytometry/flow-cytometry-reagents>

Bead-Based Kits

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

- Qbeads® Devscreen
- SA_v (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

iQue® 3: The Complete Solution for Faster Screening by 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 <https://shop.sartorius.com/c/flow-cytometry>
to find and order:

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

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