

# Intellicyt<sup>®</sup> iQue3 Faster, Smarter Flow Cytometry



# 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 CAR T-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 iQue3. 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 iQue3 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 iQue3.





#### 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, multiuser 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.

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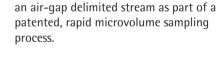
# The iQue3: **Built to Accelerate Your Research**

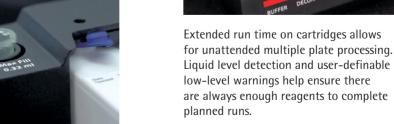
- With unique sample-handling features, intelligent processing, and automated template-based analysis, the iQue3 gets you from samples to actionable results faster than ever before.
- A simple, scalable, multi-user environment with walkaway automation, comprehensive analysis and visualization tools, and other features not found 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 384well plates in 20 minutes.
- The iQue3 comes in flexible plate formats and is suitable for a broad range of cell and beadbased analyses.



Minimal volume sampling capabilities, as little as  $1 \mu L$ , conserve samples and reagent costs.







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

Robotic integration capabilities enable high throughput applications.

# The iQue3: Get to Your Destination Faster

The iQue3 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

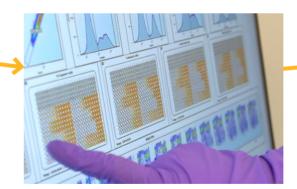
- Optimized mix-and-read reagent kits with ready-to-use analysis templates.
- Flexible fluorophore options with up to 3 laser excitation and 13 color emission channels.
- No adjustment optics for scalable, reliable, and reproducible data collection in multi-user environments.



### 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 assay optimization 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 iQue3 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 uninterrupted 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.





# Visit **shop.intellicyt.com** to find and order:

- Solutions, bottles, reservoirs, and cartridges
- iQue3 accessories
- QMax and QSol refill modules and buffers
- Beads, plates, probes, and tubing



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.



## Reagent Cartridges

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

# ForeCyt® Software: Actionable Results, Faster

One of the key features of the iQue3 platform is the ForeCyt Software; which delivers a fully integrated experience, from data acquisition to plate-level analytics and multi-parametric data visualization. In addition, ForeCyt Software is available as an enterprise edition option that provides multi-user access and multi-instrument data management.



#### 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

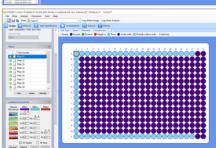
- Intuitive workflow with plate visualizations including heat maps, whole plate views, dose response and standard curves.
- Interactive gating with real-time results.
- Easy report generation and data export.

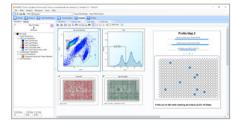


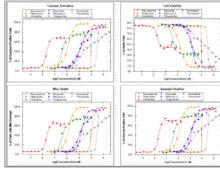
#### Visualize

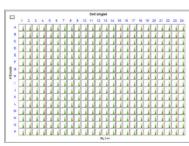
- Link visualizations together to rapidly interrogate results.
- Locate wells and arrays of interest.
- Compare, identify and rank wells across your entire experiment.





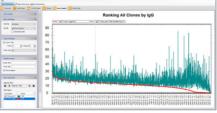




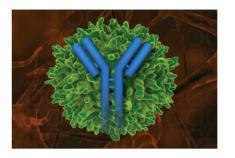








# Applications for the Intellicyt iQue3



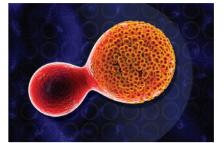
## **Antibody Discovery** and Development

Increase data throughput and quality by multiplexing antibody binding, function, and titer across the process.

- · Antibody screening
- Functional Profiling
- · Cell line development

• Th1/2 9-plex

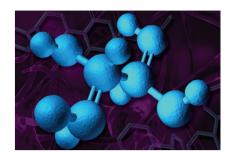
• Th1/2/17 7-plex



## 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

Intellicyt® kits include optimized reagents that are validated on the iQue3 platforms, with flexible formats. No 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: intellicyt.com/reagents

# Bead-Based Kits Cell-Based Kits **QBeads PlexScreen** Human Secreted **Proteins** • Mouse Secreted Proteins • Rat Secreted Proteins **QBeads DevScreen** SAv (Streptavidin) • SH (Sulfhydryl) Cell Proliferation **QBeads T Helper Kits** Th1/2 4-plex • Th1/2 6-plex

## MultiCyt Cell Assay Kits • Cell Cycle • 4-Plex Apoptosis • Singleplex Apoptosis (mix and match)

- Cell Membrane Integrity
- Cell Encoder
- Antibody Internalization Reagents (human and mouse)

#### Cell and Bead-Based Kits

#### **Cell Line Development**

Cy-Clone<sup>™</sup> PLUS

#### **Antibody Screening**

Mouse IgG Type and Titer

# **Immune Cell Characterization**

- T Cell Activation Cell and Cytokine Profiling
- T Cell Companion Kits
  - GM-CSF
  - IL-6
  - IL-2 - IL-10
  - IL-13
  - IL-17A

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# Intellicyt® iQue3: The Complete Solution for Faster, Smarter Flow Cytometry

# **Ordering Information**

	Laser	Channel	Plate Formats	Cat. No.
iQue3 PLUS 110V Blue-Red Configuration	2	8	96, 384	91375
iQue3 PLUS HD 110V Blue-Red Configuration	2	8	384, 1536	91381
iQue3 PLUS 110V Violet-Blue-Red Configuration	3	15	96, 384	91377
iQue3 PLUS 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

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- Solutions, bottles, reservoirs, and cartridges
- iQue3 accessories
- QMax and QSol refill modules and buffers
- Beads, plates, probes, and tubing

#### For additional information:

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