

Attune Xenith Flow Cytometer

ThermoFisher  
SCIENTIFIC

# Understand your cells on a whole new level

Fast, flexible, and spectrally brilliant—simplify high-speed, high-parameter analysis



invitrogen

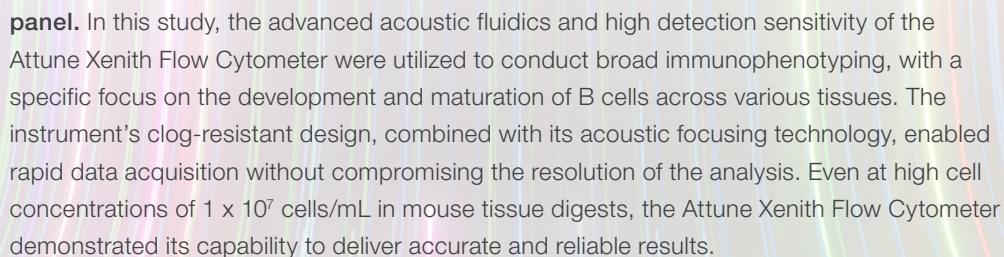


# Discover the most advanced acoustic focusing flow cytometer

A white Siemens Healthineers MRI scanner is positioned in the foreground. The background features a large, colorful, abstract brain-like structure composed of many small, rounded elements, transitioning from red on the left to blue on the right. The entire scene is set against a dark background with numerous vibrant, multi-colored light streaks radiating outwards, creating a sense of motion and energy.

- [illegible]

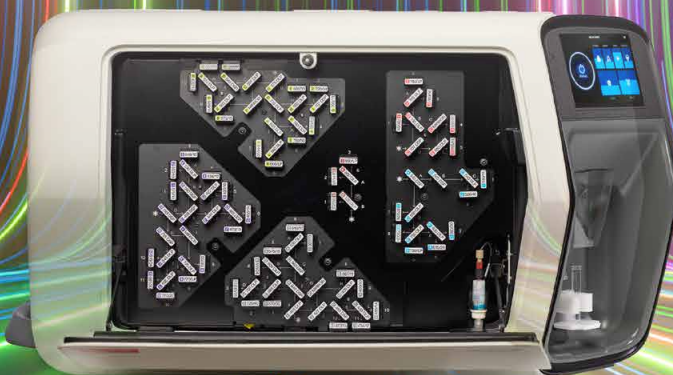
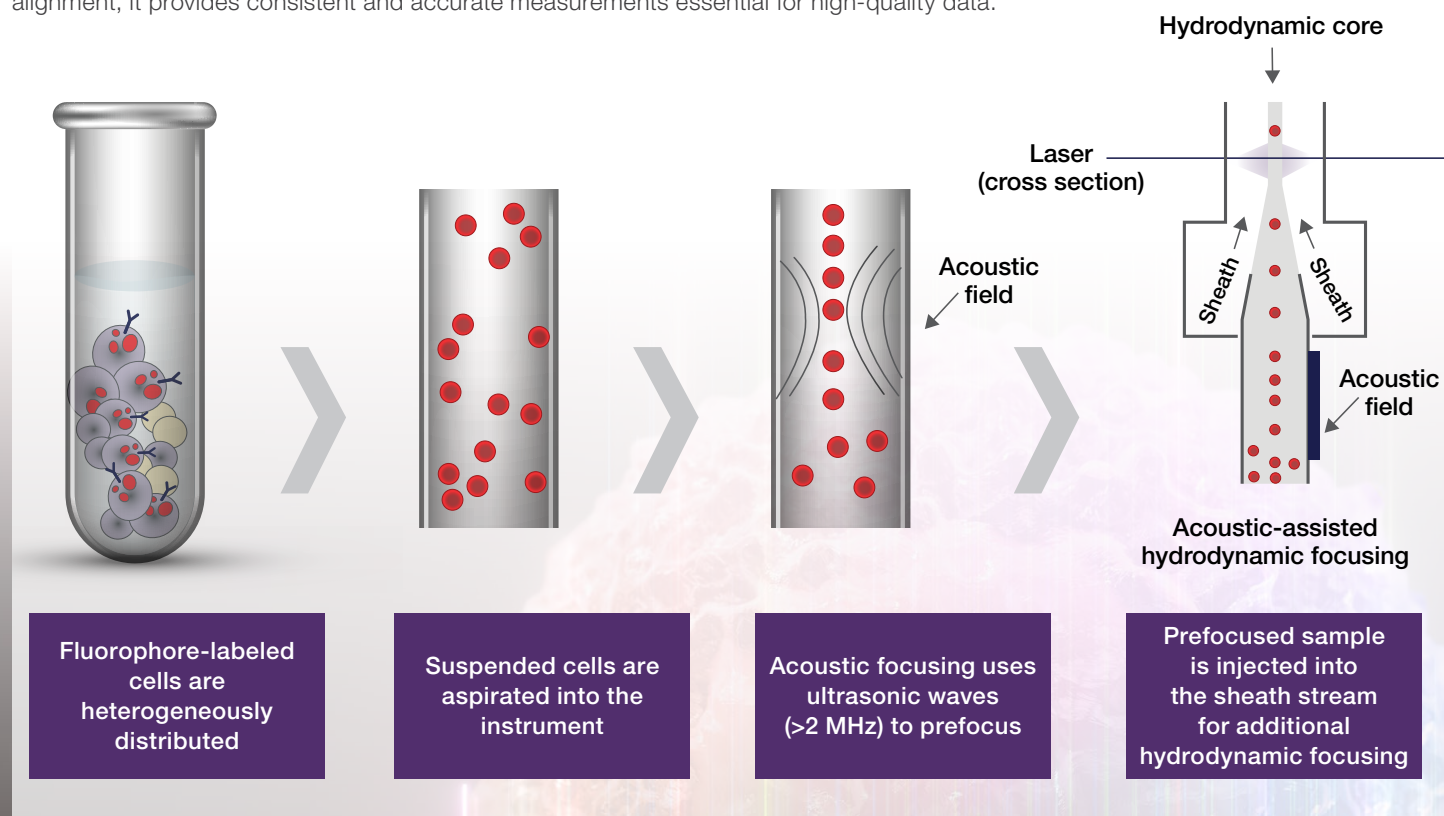
## Advanced acoustic fluidics technology allows faster acquisition without compromising results





# Acoustic-assisted hydrodynamic focusing technology

Acoustic-assisted hydrodynamic focusing technology leverages ultrasonic waves to precisely align cells, delivering exceptional speed and flexibility in flow cytometry. This approach enables faster flow rates, analysis of larger cells, and the flexibility to dilute samples. By helping to ensure uniform cell alignment, it provides consistent and accurate measurements essential for high-quality data.



# Increased uptime and simplified operation

Designed with user convenience in mind, new instrument features include:



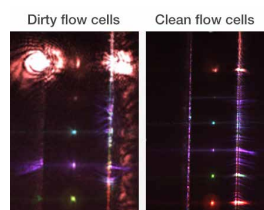
## Simplified touchscreen maintenance

Built-in touchscreen allows simple one-touch startup and shutdown independent of a PC. Easily view the instrument's continuous fluid-level sensing, acquisition progression, and maintenance instructions.



## Increased run time

The fluidics cart design allows for extended runs between fluid changes, helping to enhance productivity. The unique capability to change fluids without stopping the instrument helps ensure uninterrupted sample runs, minimizing downtime and optimizing experimental efficiency.



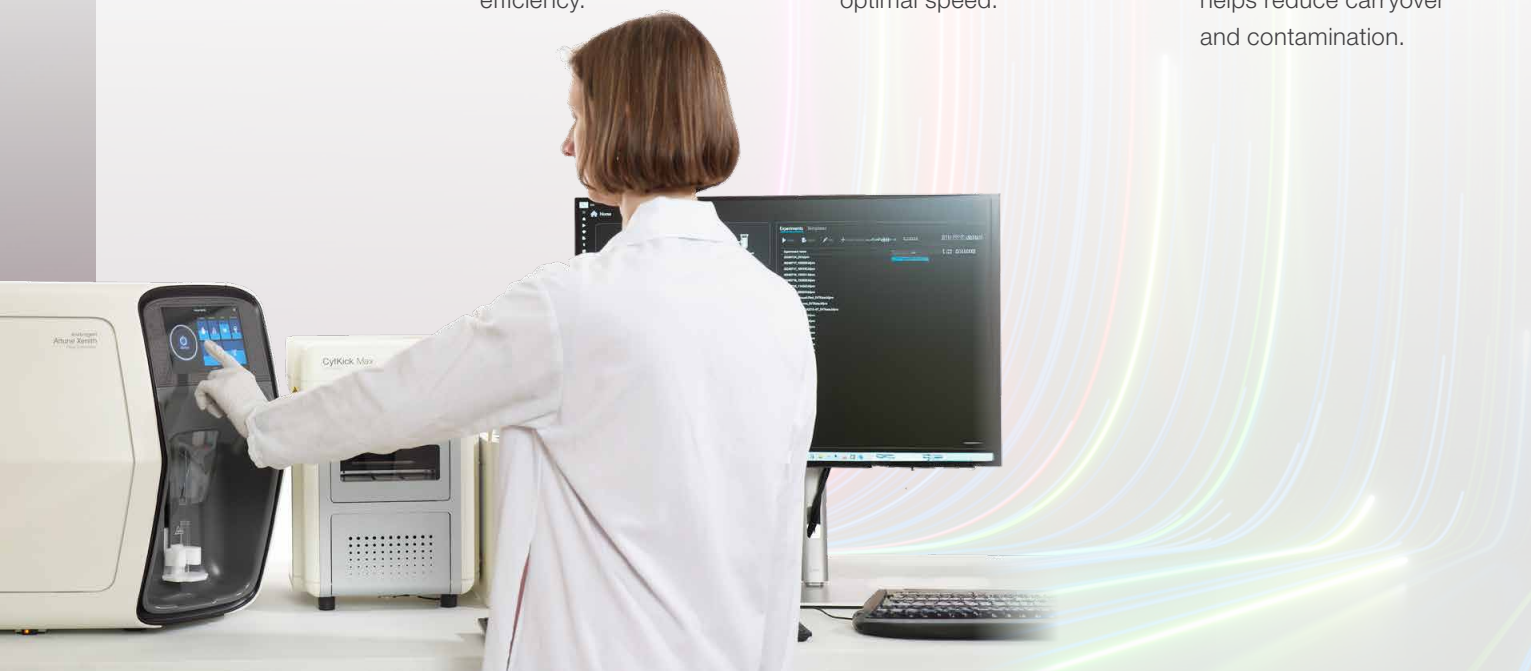
## Advanced diagnostics and service

Onboard service cameras assess flow cell cleanliness and enable remote support, allowing fast and efficient troubleshooting. Automated maintenance functions and enhanced service logging further streamline operations, helping reduce downtime and maintaining optimal speed.



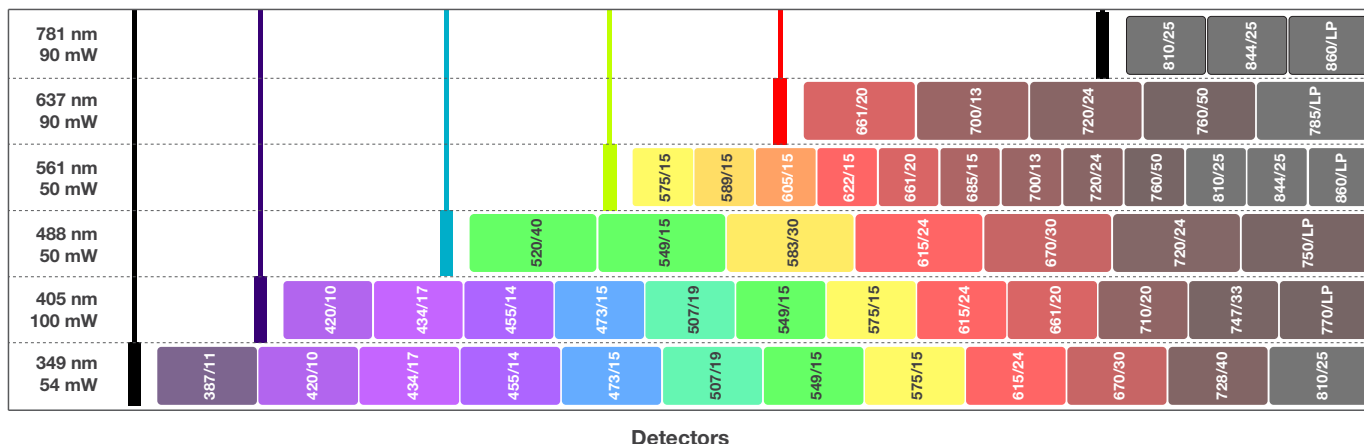
## Innovative flexibility

Designed to accommodate various tube sizes, our seal-free, volumetric syringe-based system helps minimize sample loss, enabling fast and efficient analysis. Optional automated sample recovery and rinse further enhance speed and convenience. A sample injection probe (SIP) wash helps reduce carryover and contamination.





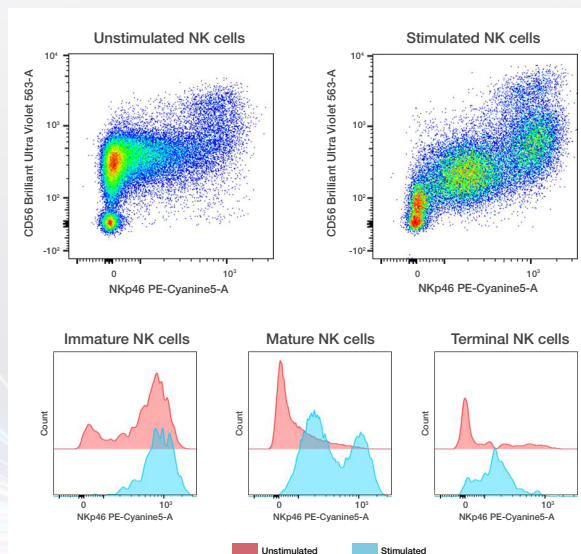
## Extensive detection range for compatibility with large panels



**Overview of lasers and fluorescent detectors.** The Attune Xenith Flow Cytometer includes 6 lasers (349 nm, 405 nm, 488 nm, 561 nm, 637 nm, and 781 nm) and 51 fluorescent detectors. It also includes 6 scatter detectors for enhanced resolution (488 nm standard FSC and SSC, 405 nm FSC and SSC for small-particle resolution, and 488 nm FSC and SSC for expanded range/polarized detection). The system supports both spectral unmixing and conventional compensation options, making it exceptional for high-parameter workflows.

## Sensitivity in detection facilitates robust data resolution to differentiate rare cell populations

**Exploration of expression profiles of NK cells across activation states.** This study utilized a natural killer (NK) cell panel to investigate the expression of surface markers before and after activation. Human NK cells were incubated with or without IL-2, IL-15, and IL-21 cytokine cocktail for a duration of 48 hours. Immature, mature, and terminal NK populations were identified, and surface marker expression of each of these subpopulations was characterized. The Attune Xenith Flow Cytometer demonstrated strong sensitivity in detecting changes in marker expression before and after stimulation using a 25-color spectral panel. This data demonstrates the system's fluidic and optical capabilities for deeper understanding of even rare subpopulations at rapid acquisition rates.





## Service and support

Keep your instruments running smoothly with our reliable support. With over 40 years of expertise, our extensive network of more than 2,000 trained professionals is ready to assist you. Take advantage of smart features like remote instrument services to stay productive and focused on your discoveries. To learn more, visit [thermofisher.com/attuneservices](https://thermofisher.com/attuneservices)

**Need help designing your panels?** Build your panels for free with our Panel Design Service or use our online Panel Builder Tool. Benefit from expert support, quick turnaround, and antibody recommendations. Start designing today at [thermofisher.com/panelbuilder](https://thermofisher.com/panelbuilder)

 Learn more at [thermofisher.com/attunexenith](https://thermofisher.com/attunexenith)

**invitrogen**

**For Research Use Only. Not for use in diagnostic procedures.** © 2024 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. APC/Fire and PE/Fire are trademarks of BioLegend. Brilliant Violet and Brilliant Ultra Violet are trademarks or registered trademarks of Becton, Dickinson and Company or its affiliates, and are used under license. Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company. Not for resale. Cy is a registered trademark of Cytiva. RealBlue is a trademark of Becton, Dickinson and Company. **BROC-8856925 1024**