



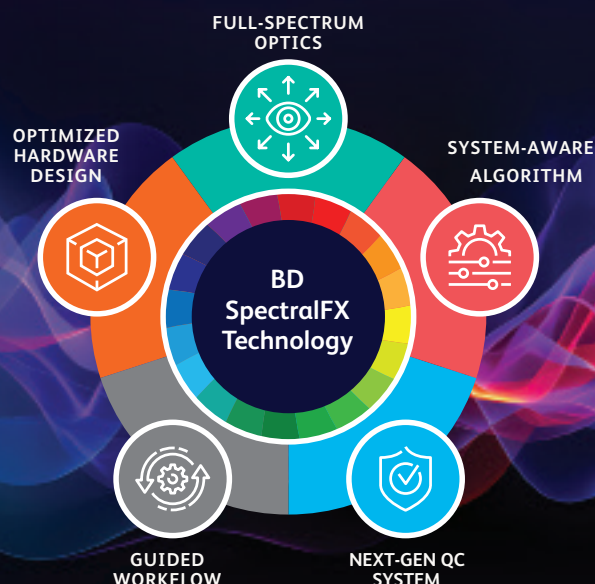
BD FACSDiscover™ A7 Cell Analyzer with BD SpectralFX™ Technology and FACSTruQ™ Technology

The BD FACSDiscover™ A7 Cell Analyzer redefines spectral flow cytometry standardization. Combining our advanced standardization FACSTruQ™ Technology and high spectral resolution BD SpectralFX™ Technology, it delivers reliable, reproducible, high-quality data with greater confidence and streamlined workflows.



State-of-the-art spectral flow cytometry.

Design panels around biology without compromising on robust data quality with BD SpectralFX™ Technology.



Achieving data quality in spectral flow cytometry shouldn't be difficult.

Increasing panel complexity and size should expand biological discovery, not limit confidence in your results. BD SpectralFX™ Technology combines optimized full-spectrum optics, system-aware unmixing, and next-generation setup and QC to help maintain resolution as panels grow more complex.



Optimized hardware design and full-spectrum optics

Delivers spectral resolution and sensitivity. Up to 5 lasers and 78 APD fluorescence detectors + 3 scatter detectors.



System-aware unmixing

Adapts to electronic noise, optical background and detector gains to manage spread where the panel is hardest.



Next-generation setup and QC

On-board LED characterization and Setup Beads establish a consistent measurement foundation.

Software for simpler spectral

Pair the hardware and algorithm with built-in panel-quality tools to move from dye choice to robust data faster.



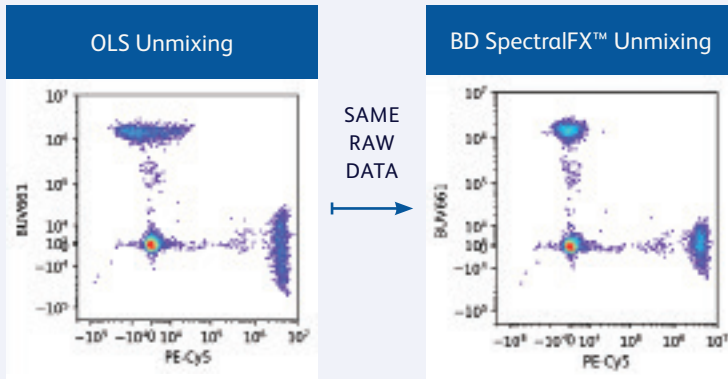
The BD FACSDiscover™ A7 Cell Analyzer: Purpose-built for spectral flow

- » Brighter lasers enhance signal strength
- » Innovative collection optics boost sensitivity
- » Designed for speed: 35,000 events/sec. acquisition with no sensitivity compromise

Minimum Spread. Maximum Resolution and Insight.



A system that can help you identify co-expressions, dim markers, and rare cell populations with more confidence.

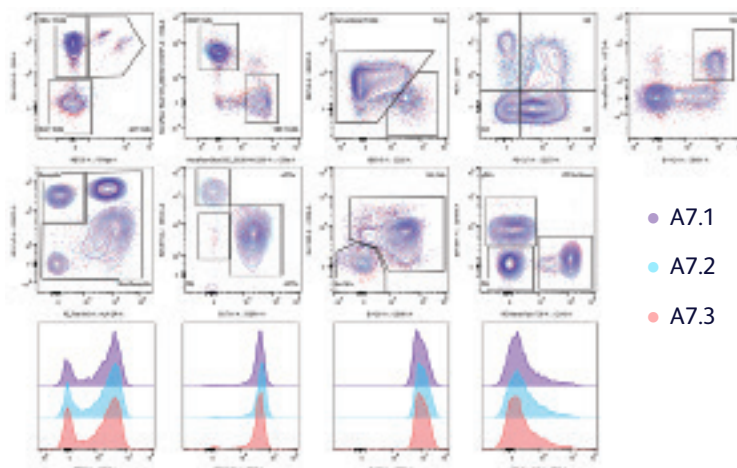


BD SpectralFX™ Technology goes beyond other spectral unmixing approaches by incorporating real-time detector characterization and QC information into the unmixing process. By accounting for system performance and sample conditions at acquisition, it helps minimize spread, preserve resolution, and maintain data quality even when detector settings need to be adjusted.

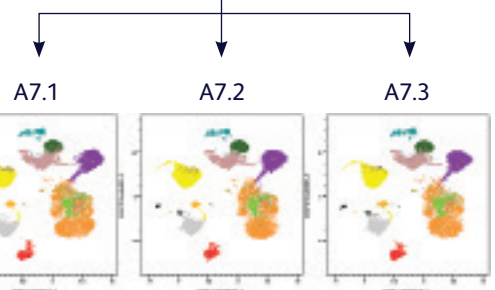
Sample: Lysed Whole Blood . Reagents: CD4 stains for BUV395, BUV661, BV421, BV786, BB515, RB780, PE-CF594, PE-Cy5, R718, APC-Cy7

BD FACSDiscover™ A7 Cell Analyzer in action: 50 colors, 3 instruments, 1 afternoon

Cross-instrument OMIP-102 evidence combines high-parameter resolution with reproducible population patterns at default settings.



OMIP-102: 50-color phenotyping of the human immune system with in-depth assesment of T-cells and dendritic cells



Time per Instrument

- » Settings optimization: **0 mins**
- » Hands on time: **30 mins**
- » Start to finish: **2 hrs**

The same biology should not tell a different story because the instrument, operator or day changed. FACSTruQ™ Technology integrates detector characterization, system calibration, and Detector Setting Independent (DSI) scaling to make advanced standardization part of everyday operation.

The same biology should not tell a different story because the instrument, operator or day changed. FACSTruQ™ Technology integrates detector characterization, system calibration, and Detector Setting Independent (DSI) scaling to make advanced standardization part of everyday operation.



**Daily Setup
and QC includes
a unique
comprehensive
automated
system
calibration**



Pre-optimized settings. The default settings are optimized to support a wide range of experiments and assays, making spectral flow easier for non-experts.



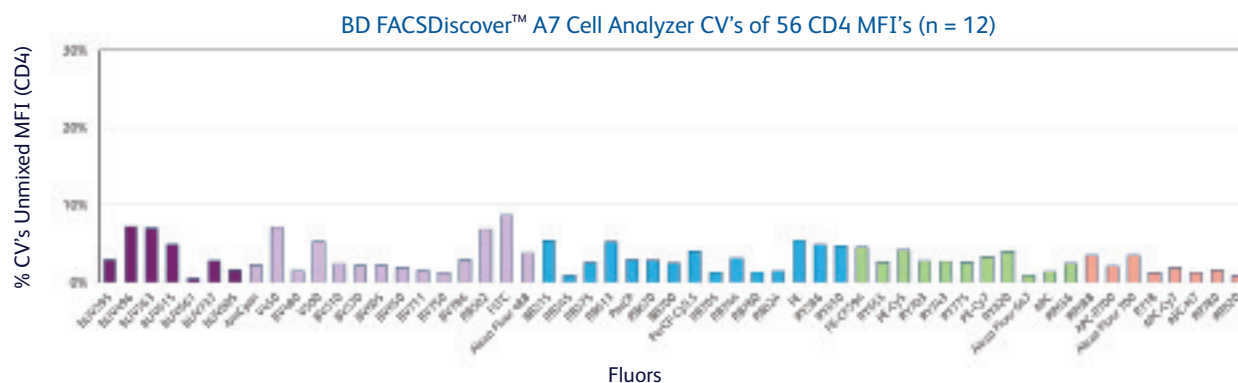
Data reproducibility without compromise. Keep one biological interpretation across experiments, users, and instruments. No need for a dedicated mode or locks that limit your flexibility.



Standardization by design. Achieve data reproducibility at default settings without the need for a dedicated manual harmonization program.



- » 12 BD FACSDiscover™ A7 Cell Analyzers
- » 56 CD4 single-stains
- » Pre-optimized default settings



When biology forces a detector setting change, data comparability holds.



Anchor interpretation to biology, not detector settings.

FACSTruQ™ Technology with DSI scaling makes reported Mean Fluorescence Intensity (MFI) independent of detector settings. Researchers can adapt acquisition to the sample or assay without creating a new measurement baseline, helping preserve gates, batch analysis, and study continuity.



Protect validated assays

Contain a setting change without triggering a full re-validation cascade.



Maintain study continuity

Compare longitudinal timepoints even when biology changes go beyond the instrument dynamic range.



Anchor gates to biology

Keep population placement consistent across detector settings.



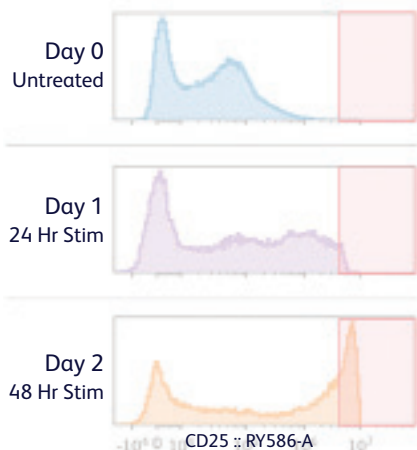
Scale reproducibility

Support common interpretation across users, instruments and sites.

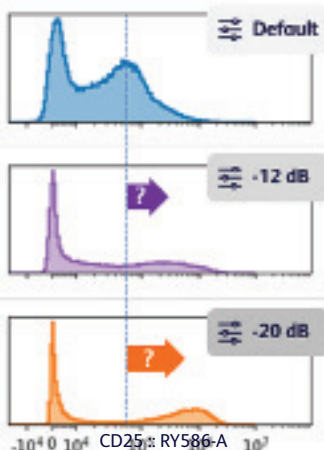
Unexpectedly bright samples require settings adjustment

With FACSTruQ™ Technology DSI, ensure data comparability even when settings change.

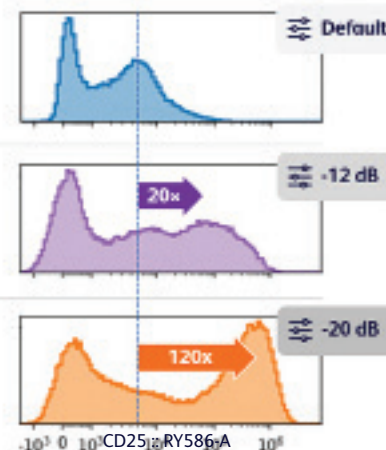
Off-scale signals prevent accurate analysis and cause unmixing errors



Mismatched settings obscure real biological change



DSI scaling preserves biological comparability across different settings



A common problem faced by researchers: “We didn’t know on Day 0 what settings we’d need on Day 2.”

Move from panel design to trusted data faster.

BD FACSCorus™ Software combines a guided interface with tools that help researchers evaluate panel quality, manage multiple autofluorescence efficiently, and select the matrix that best supports the experiment.

➤ Handle Multiple Autofluorescence efficiently

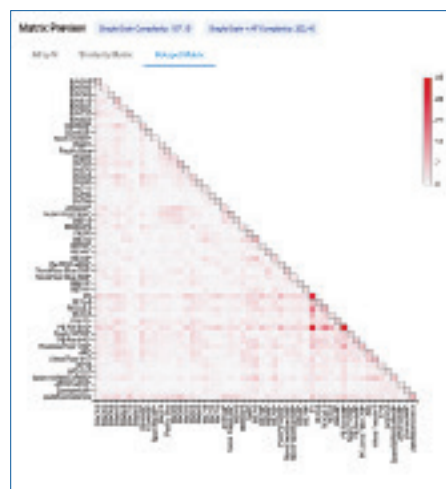
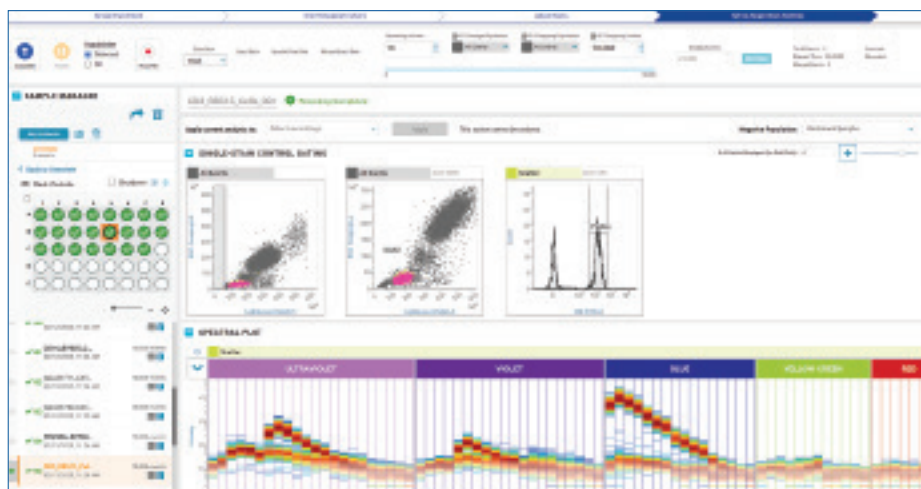
Separate biological signal from complex sample background, improving confidence when analyzing challenging tissues and heterogeneous samples.

➤ Take advantage of data quality tools and spectral feature pack

The hotspot matrix highlights fluorochrome and autofluorescence combinations most likely to create unmixing-dependent spread in your panels. Choose either beads or cells as controls, import single-color controls, and manually adjust matrices when needed. The software also supports 21 CFR Part 11 compliance requirements.

➤ Preview before you commit your samples

Compare multiple spectral matrices within the experiment and apply the option that supports the best data quality.





Walk away with confidence. Come back to data.

The integrated loader combines walkaway automation, sample protection, and workflow efficiency.

Keep your experiments running while you focus on science. With automated sample handling, mixing, temperature control, and recovery features, the integrated autoloader helps minimize interruptions, improve workflow efficiency, and support reproducible results. Reduce hands-on time, allowing your team to process more samples with less effort.



Complete flow cytometry expertise for every step of your research.

Technology, support, and workflow solutions designed to work together.

The BD FACSDiscover™ A7 Cell Analyzer delivers advanced standardization in spectral flow cytometry along with a broader ecosystem that supports experiment design, acquisition, analysis and long-term operation.

Technical Service

- » Flexible service options
- » On-site and remote support
- » Preventive maintenance



Informatics

- » FlowJo™ Software
- » BD® Research Cloud
- » BD Horizon™ Panel Maker



Expert Applications Support

- » Panel and workflow consultation
- » Scientific collaboration expertise
- » Support from setup through insight



Reagents

- » BD Horizon™ Real Dyes
- » BD Horizon™ Chroma Dried Panel
- » Single-color antibodies (RUO/GMP)



BD FACSDiscover™ A7 Cell Analyzer

Less Setup. More Science.
Trusted data. Simple to scale.



- » Schedule a demo
- » Request a panel consultation

BD flow cytometers are Class 1 Laser Products.
For Research Use Only. Not for use in diagnostic or therapeutic procedures.
BD Life Sciences, Milpitas, CA 95035, U.S.

bdbiosciences.com/A7

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