



Accelerating your spectral flow

BD solutions to help you get the most from
your experiments



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Fast-track your journey to discovery and unleash the full potential of spectral flow cytometry with BD Biosciences.

From panel design expertise and a comprehensive spectrum of fluorochromes, to advanced data analysis tools, we can help at every step of the way. Our commitment is to offer you tangible solutions that not only enhance the precision of spectral flow cytometry but also accelerate your journey to discovery - no matter your instrument of choice.

This folder has been tailor-made to address your key areas of support in the below spectral workflow, but a full suite of BD solutions and educational resources can be found below:



[Browse our spectral solutions](#) and sign up to educational content delivered to your inbox



Prepare your spectral experiment

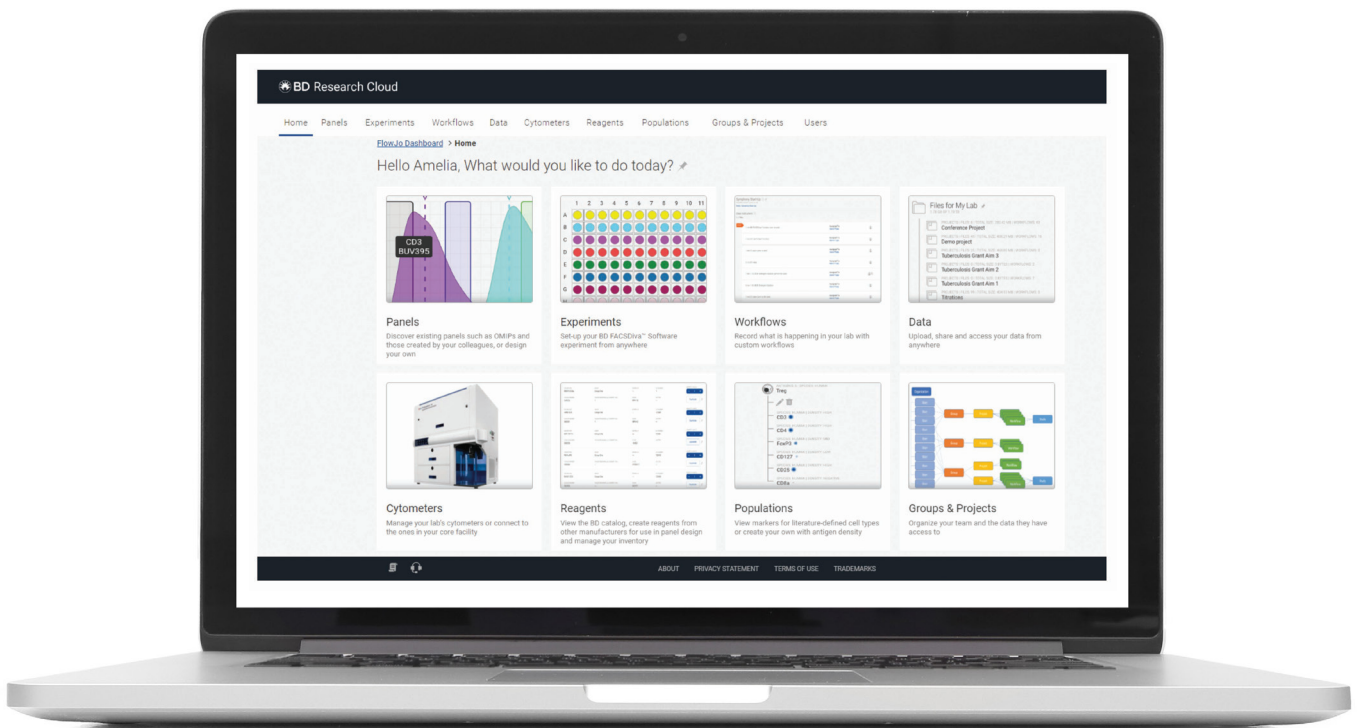
Manage your experiment with BD Research Cloud™ (BDRC)

With an unprecedented number of parameters comes the need for high experimental rigor.

BD® Research Cloud is a cloud-based software solution designed to integrate and facilitate flow cytometry experiments. Its flexible workflow functionality allows labs to create customised workflows for tracking experiments, and keep all the data, metadata and resources associated with an experiment in a single-site collaborative platform.

With BD® Research Cloud, you can design your next flow cytometry panel on conventional or BD spectral cytometers; minimise the time spent moving data between systems; assign workflow steps, collaborate within the platform, manage your reagent inventory, titers and master mixes; and more.

BD® Research Cloud also integrates directly with FlowJo™ Software and regular BDRC software releases will add new features to further accelerate your spectral workflow.



[Learn more](#) about the full suite of BDRC features and sign up for a free account

The dyes at your disposal

A new generation of spectrally optimised fluorochromes

The ability of spectral flow cytometry to examine the entire spectrum has led to the development of new dyes with distinct spectral signatures. The BD HorizonRealYellow™ and BD Horizon RealBlue™ fluorochromes are a new family of clean, spectrally optimised fluorochromes for the blue and yellow-green laser lines.

Our newest family of dyes is specially engineered to deliver reduced spillover and optimised resolution when used with other fluorochromes – helping to enable flexible panel design and high-parameter research on spectral flow cytometers.

With seven dyes already released and counting, the easiest way to stay up to date on new releases is to visit our website:



[See the latest releases of RealDyes](#)

A [comprehensive catalogue](#) of reagents available online

With thousands of fluorochrome/antibody combinations available to order online, BD has a broad portfolio of research reagents to enable greater experimental power.

[BD Horizon Brilliant™ Dyes](#)

Optimally resolve dim populations with brighter options. These dyes can be brighter than conventional ones with equivalent background. Available for the blue, violet and ultraviolet lasers, they allow markers to be spread over more detectors, reducing overall compensation. These dyes are available on BD OptiBuild™ Reagents which are delivered within 3 days in environmentally-friendly envelopes.

[Classic Dyes](#)

Balancing a multicolour flow cytometry panel can be difficult, and brighter is not always better. We've got the options you need to improve your overall data resolution and bring your panel together in perfect harmony. From FITC and PE to tandem dyes, BD brings a broad portfolio of classic dyes to your fingertips. You can now get even more out of cyanine and cyanine-tandem dyes with the BD Pharmingen™ MonoBlock™ Leukocyte Staining Buffer, formulated to block non-specific binding.

Use our suite of tools and resources to speed up your panel design

Webinars and Education

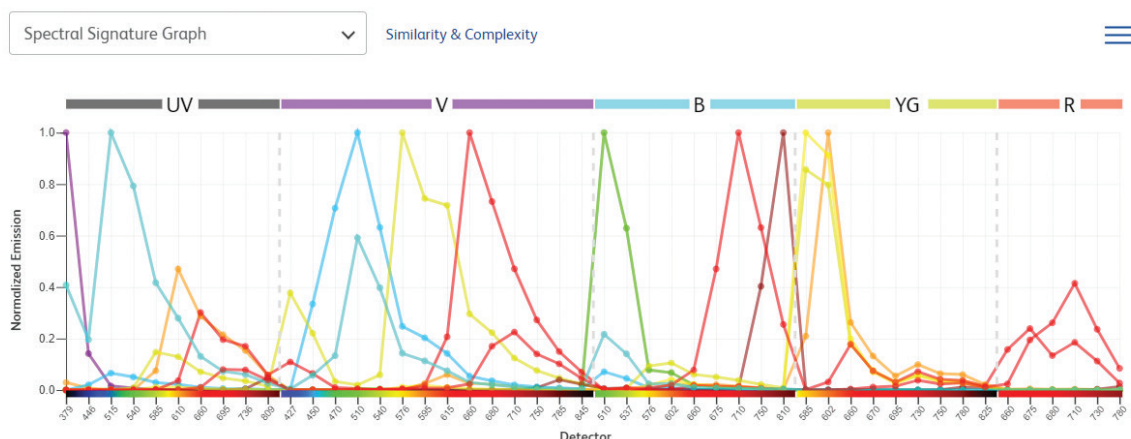


Watch our [webinar](#) on the special considerations for spectral panel design, addressing the fundamental similarities and differences between conventional and spectral flow cytometry and dives deeper into facts and misconceptions around the principles of spectral panel design.

BD[®] Spectrum Viewer



An interactive, [online tool](#) to support flow cytometry fluorochrome comparison and selection. In the latest update, you can now access similarity and complexity indexes and visualise peak intensities of spectral signatures in a unique heatmap.



BD[®] Research Cloud

BD has been a leader in panel design education since the BD Horizon tours in 2014, and the Reagent Selector tool inside [BD[®] Research Cloud](#) guides users through a panel design process consistent with those principles. Growing capabilities with regular releases will also add new features to further accelerate your spectral workflow.

- Visualise your panel with multiple spectrum viewer graphs, including a unique spectral heatmap and similarity and complexity values for BD spectral cytometers.
- Define, store and share your cytometer configurations for use in panel design.
- Define your biology using pre-defined populations and add your antigen density.
- Assign your fluorochromes according to optimised principles and access panel repositories for more agile panel design.
- Easily select and order reagents, share your panel with a colleague or request a quote.

Design your spectral panel from a pre-optimised backbone

BD Interactive Human Cell Map Tool and Panel Repository

An educational tool designed to help you plan your experiments and browse existing pre-optimised panels.

- Visualise immune cell hierarchies
- Identify key cell markers
- Review existing flow cytometry panels and data
- Navigate to our catalogue seamlessly



[Explore](#) cell lineages and browse pre-optimised panels

BD Lymphocyte Panel Blocks

Optimised immunophenotyping panels to accelerate your high-parameter research through standardisation and reduced set-up time.

Introducing pre-designed lymphoid and myeloid panel modules, that can be used as starting point for immunophenotyping. These blocks can be combined in different ways, depending on whether broader or deeper phenotypes are required.

- Compatible with BD Horizon™ Fixable Viability Stain 575V
- Drop-in channels suggested with Total Spread Matrix information provided



[Discover](#) the BD Leukocyte Panel Blocks and associated protocols

Design your spectral panel with a BD scientist

Want help with a bespoke spectral panel design?

Whether you want to design your spectral panel from scratch, or just need a final check, we're here to help. With diverse experience in research applications and a thorough understanding of BD Biosciences products, you can count on our BD Technical Applications Specialists for expert guidance and application-specific inquiries.



- One-on-one experiment design consultations and support
- Bespoke pricing for your panel
- We will swap out reagents at no extra cost, until your panel works*

Panel performance matters

We're ready to support your workflow from design to performance.

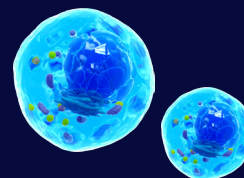
If there's an issue with the resolution of key markers and a re-design is required, we will provide alternate fluor-antibody combinations at no additional cost beyond the initial panel purchase price, provided the panel was vetted by one of our BD Technical Applications Specialists. Terms and conditions apply. *



[Visit](#) the panel design page

Visit our website to access key resources and tools and sign up to receive more educational content.

Request a consultation with our colour-changing experts. Email help.biosciences@bd.com



*Panel iterations must be verified by a BD Applications Specialist. Valid only on panels designed by BD Biosciences in the last 2 months. Swaps that constitute more than a 20% change of the total number of reagents must be approved by BD. Offer available on full panels only.

Recommendations given by representatives of BD in the context of the creation and setup of customer-specific applications and assays and the composition of antibody panels for use in flow cytometry assays are provided in a diligent manner. However, the Customer acknowledges that (i) such recommendations should not be treated as a substitute for the Customer's own examination, (ii) BD does not make any promises nor guarantees that recommendations are accurate and complete and will meet the Customer's present or future needs or will produce positive or specific results and (iii) Customer remains solely responsible for validating and deciding on any such recommendations.

BD, therefore, accepts no liability whatsoever in connection with any such recommendation and/or any results generated on the basis of such recommendations and, to the fullest extent permitted by law, expressly disclaims any and all warranties and any liability in this respect. In particular, the Customer assumes sole responsibility for the validation, use, selection, and suitability of the recommendations for its needs and objectives.

Get insights from your spectral data

FlowJo™

Featuring an intuitive interface, specialised analysis platforms and open-ended plugin architecture, FlowJo™ Software provides a powerful statistical environment for single-cell flow cytometry analysis that can be used for immunophenotyping, cell cycle, proliferation, kinetics studies, quantitative population comparison or plate screening assays.

Analyse any .fcs file from any cytometer, using the intuitive drag-and-drop analysis and tools to analyse high-parameter data, and generate publication-quality graphics, all with FlowJo™ Software.



[FlowJo University Classes](#)



[Explore Plugins at FlowJo Exchange](#)

BD Service and Support

BD Biosciences instruments and reagents are backed by a world-class technical service and scientific application support organisation with unmatched flow cytometry experience.

BD Biosciences technical application support specialists are available to provide both on-site or remote support on instruments, software and reagents across a broad range of applications. You are welcome to contact us, for example, for panel design support or assistance in setting up and optimising your BD instrument.

BD also offer a variety of flow cytometry training courses for instruments and applications, to help you take full advantage of the capabilities of BD products quickly and efficiently.

Please contact your local BD representative for more information or email help.biosciences@bd.com to be directly connected with our Scientific Support Team.

Did you know?

You can now reach our Scientific Support Team via live web-chat.

Go to bdbiosciences.com and click the “Message Us” button available 9:00 - 17:00 CET.

BD Flow Cytometers are Class 1 Laser Products.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

Pacific Blue, Alexa Fluor and Texas Red are trademarks of Life Technologies Corporation. Cy is a trademark of Global Life Sciences Solutions Germany GmbH or an affiliate doing business as Cytiva. CF is a trademark of Biotium, Inc.

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