



# BD FACSymphony™ Flow Cytometer

Special Order Research Product

Customized solutions for high-parameter cell analysis



# Driving deeper scientific insights

High-parameter flow cytometry is a powerful analytical tool that enables scientists to identify and analyze distinctive phenotypes in heterogeneous populations. The BD FACSymphony™ flow cytometer is a novel cell analyzer that leverages the inherent benefits of flow cytometry and enables the simultaneous measurement of up to 50 different characteristics of a single cell.

This advanced instrument features an ultra-quiet VPX electronics system that supports up to 50 high-performance photomultiplier tubes (PMTs) and improves detection sensitivity to enable you to identify and analyze rare cell types and events. The capabilities of this platform technology uniquely allow you to conduct deep and broad phenotyping and gain richer scientific insights by fully leveraging the broad portfolio of BD Horizon Brilliant™ reagents.

With early access to newly developed BD Horizon Brilliant dyes, this platform helps you to overcome research challenges such as collecting maximal information from a precious sample and increases lab throughput with broad phenotyping panels that combine multiple cell line specific panels.

This highly customizable platform can be configured so you can select from multiple laser wavelengths and power ratings and choose the positions of decagon detection arrays to address the requirements of your specific research application.



# Customizable models provide flexibility for your research lab

## BD FACSymphony™ A5

- Configure to your needs today with room for growth tomorrow
- Up to 50 detection parameters (including FSC and SSC) featuring decagon arrays for up to 10 parameters on a single laser line
- Select and configure up to a maximum of 10 lasers\* from various wavelengths with multiple power ratings



\*Dependent on laser choice

## Custom optics for your application

### BD SORP 2016 – 25 Wavelength Laser Portfolio



355 nm	505 nm	637 nm
375 nm	514 nm	640 nm
405 nm	532 nm	647 nm
420 nm	552 nm	660 nm
445 nm	561 nm	685 nm
458 nm	568 nm	730 nm
460 nm	588 nm	785 nm
473 nm	592 nm	980 nm
488 nm	628 nm	

In the spirit of Special Order Research Products (SORP), there are 25 laser wavelengths to choose from to optimally configure your BD FACSymphony instrument for your specific research application. Additionally, there are multiple power ratings for most lasers that can be adjusted, stored and recalled using digital laser command and control functionality.

Innovation in detection array technology has allowed for a decagon formation to detect 10 parameters on a single laser line. The arrays can be configured on the laser of your choice.



Fluorochrome availability and excitation characteristics across various wavelengths should be discussed during the configuration process to identify the best use of reagents for your research. Optimal laser power settings for certain fluorochromes may be available.

Highlighted wavelengths are common laser choices

# Broad portfolio of high-quality dyes and conjugates expand options for experimental design

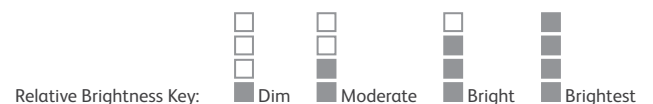
BD's broad portfolio of fluorochromes featuring the BD Horizon Brilliant™ dyes offers flexibility for experimental design. Leverage the principles of antigen density and relative fluorochrome brightness to optimally design your panel.

**Note:** For specificities not yet available in the catalog or through BD OptiBuild™ custom reagents, high-parameter users have access to a small scale custom conjugation program for the BD Horizon Brilliant™ dyes, including early access to the high-parameter dye menu described below.

BD OptiBuild™ custom reagents offer on-demand access to hundreds of specificities associated with a range of BD Horizon Brilliant™ dyes, available in small sizes with quick turnaround times. This new portfolio of over 1,000 recently released conjugates complements the existing catalog reagents with a wide selection of cell surface antibodies that previously had few color options to choose from. Revisit this portfolio often, as we continue to expand the BD OptiBuild offering so that you can simplify the addition of markers to your experiments without the limitations of reagent availability.

Excitation Laser Line	Channel	Recommended Filter	Fluorochrome	Ex-Max (nm)	Em-Max (nm)	Relative Brightness
UV	1	379/28	<b>BD Horizon™ BUV395</b>	348	395	■ ■ ■ ■
	2	515/30	<b>BD Horizon™ BUV496</b>	348	496	■ ■ ■ ■
	3	585/15	<b>BD Horizon™ BUV563</b>	348	563	■ ■ ■ ■
	4	•	<b>BD Horizon™ BUV615-P</b>	349	616	■ ■ ■ ■
	5	670/25	<b>BD Horizon™ BUV661</b>	348	661	■ ■ ■ ■
	6	740/35	<b>BD Horizon™ BUV737</b>	348	737	■ ■ ■ ■
	7	820/60	<b>BD Horizon™ BUV805</b>	348	805	■ ■ ■ ■
Violet	8	450/40	<b>BD Horizon™ BV421</b>	407	421	■ ■ ■ ■
		450/40	<b>BD Horizon™ V450</b>	404	448	■ ■ ■ ■
		450/40	<b>Pacific Blue™</b>	401	452	■ ■ ■ ■
	9	525/40	<b>BD Horizon™ BV480</b>	436	478	■ ■ ■ ■
		525/50	<b>BD Horizon™ V500</b>	415	500	■ ■ ■ ■
		525/40	<b>BD Horizon™ BV510</b>	405	510	■ ■ ■ ■
		•	<b>BD Horizon™ BV570</b>	407	574	■ ■ ■ ■
	11	610/20	<b>BD Horizon™ BV605</b>	407	602	■ ■ ■ ■
	12	660/20	<b>BD Horizon™ BV650</b>	407	650	■ ■ ■ ■
	13	710/50	<b>BD Horizon™ BV711</b>	407	711	■ ■ ■ ■
14	•	<b>BD Horizon™ BV750-P</b>	407	748	■ ■ ■ ■	
15	780/60	<b>BD Horizon™ BV786</b>	407	786	■ ■ ■ ■	
Blue	16	530/30	<b>BD Horizon™ BB515</b>	490	515	■ ■ ■ ■
		530/30	<b>Alexa Fluor® 488</b>	495	519	■ ■ ■ ■
		530/30	<b>FITC</b>	494	519	■ ■ ■ ■
	17	•	<b>BD Horizon™ BB630-P</b>	484	631	■ ■ ■ ■
	18	•	<b>BD Horizon™ BB660-P</b>	484	667	■ ■ ■ ■
	19	695/40	<b>PerCP**</b>	482	678	■ ■ ■ ■
		695/40	<b>BD Horizon™ BB700-P</b>	484	695	■ ■ ■ ■
20	•	<b>PerCP-Cy™5.5**</b>	482	695	■ ■ ■ ■	
Yellow-Green	21	•	<b>BD Horizon™ BYG584-P</b>	563	584	■ ■ ■ ■
		575/26	<b>PE*</b>	496	578	■ ■ ■ ■
	22	610/20	<b>BD Horizon™ PE-CF594*</b>	564	612	■ ■ ■ ■
	23	670/14	<b>PE-Cy™5*</b>	564	667	■ ■ ■ ■
24	780/60	<b>PE-Cy™7*</b>	564	785	■ ■ ■ ■	
Red	25	660/20	<b>APC</b>	650	660	■ ■ ■ ■
		660/20	<b>Alexa Fluor® 647</b>	650	668	■ ■ ■ ■
	26	730/45	<b>BD Horizon™ APC-R700</b>	652	704	■ ■ ■ ■
		730/45	<b>Alexa Fluor® 700</b>	696	719	■ ■ ■ ■
27	780/60	<b>APC-Cy7</b>	650	785	■ ■ ■ ■	
	780/60	<b>BD™ APC-H7</b>	650	785	■ ■ ■ ■	

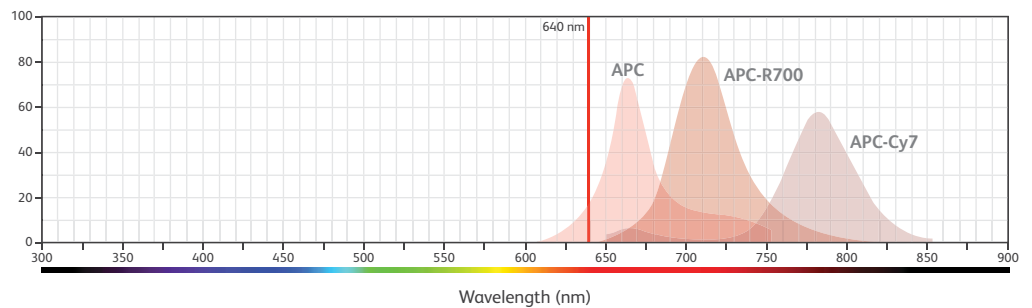
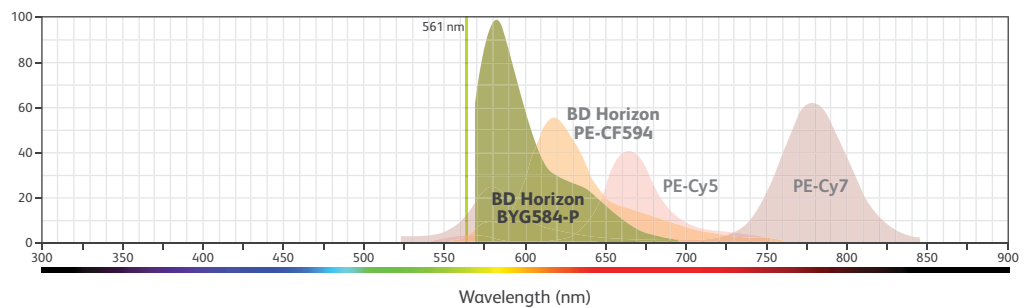
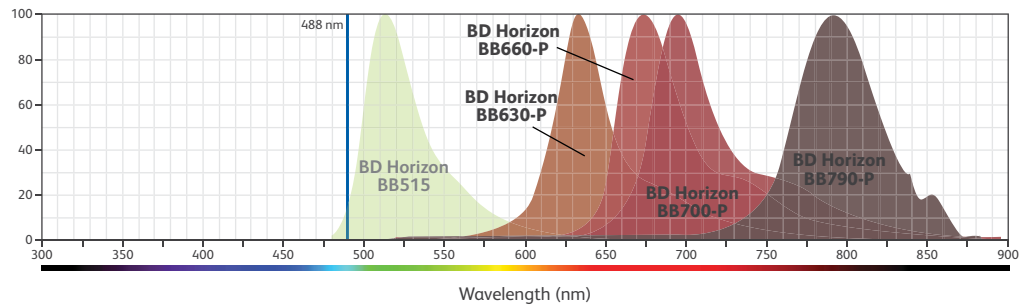
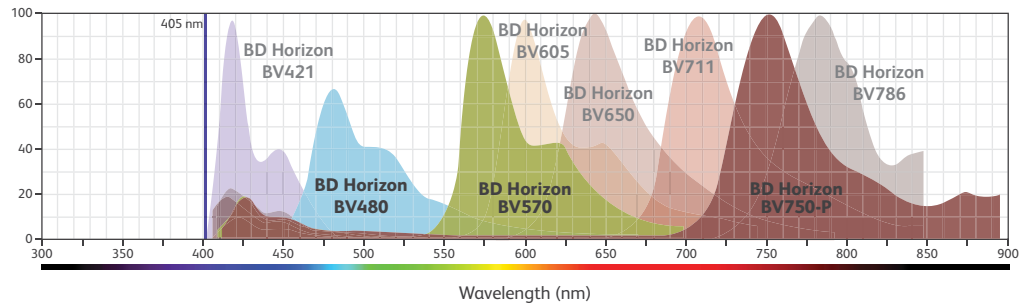
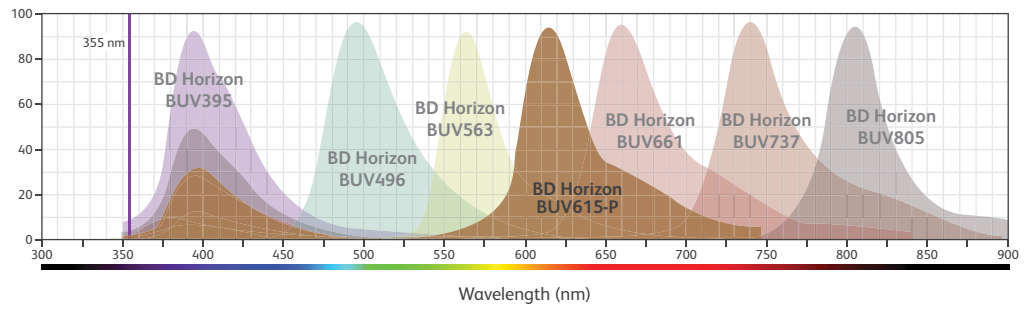
•Filter recommendations will be provided based on instrument configuration  
 \*Excited by 488 nm, 532 nm, and 561 nm  
 \*\*Excited by 488 nm and 532 nm



# Prototypes of BD Horizon Brilliant™ dyes (-P)

BD Life Sciences is committed to continuing to develop new BD Horizon Brilliant™ dyes across various laser lines to improve spectral properties of dyes and minimize the need for compensation in higher order panels.

BD FACSymphony owners receive early access to a suite of prototype dyes for use in high-parameter panel design. Although these dyes are near completion and have received initial quality specifications, they may undergo additional development that could result in minor performance changes. The -P nomenclature indicates the prototypic nature of the dyes, and any significant changes to the structure of the dye to optimize performance will be appropriately communicated to customers.



# Exclusive high-parameter reagent access and specialized support

Reagent availability is critical for high-parameter panel design. The high-parameter custom reagent program is specifically designed to cater to the needs of researchers looking to achieve >20 parameter flow cytometry analysis.

While many of the BD Horizon and BD Horizon Brilliant dyes are featured in the BD catalog, the prototype dyes are exclusively available through the high-parameter custom reagent program. This program allows you to acquire small-scale custom reagents on the prototype dyes and any other dyes in the BD Horizon Brilliant family to optimally design your complex multicolor panels.

Additionally, all systems will come with access to reagents and specialized support to get you up and running as quickly as possible. This includes onsite and offsite support from our team of dedicated high-parameter application specialists to discuss your research goals and consult with you about reagent choice to simplify your panel design activities.

The reagents provided with purchase of a BD FACSymphony instrument will assist you in setting up your instrument, identifying spectral characteristics when running various fluorochromes simultaneously, and beginning design of your initial panels. The reagents will include a fluorochrome evaluation kit, a suite of human CD4 SK3 reagents in nearly every color option to evaluate detection capabilities of your custom BD FACSymphony configuration. The kit also includes samples of specificities on the color of your choice for your research needs. Where available, reagent access includes high concentration, mass size human reagents to avoid dilution effects in high-parameter cocktails.

As part of the program, you will be given a dedicated point of contact for ordering reagents, contacting the specialized applications team, and answering your high-parameter questions.

Contact [BDB\\_HPS\\_VIP@bd.com](mailto:BDB_HPS_VIP@bd.com) for all your high-parameter needs.





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