BD Horizon Brilliant™ Ultraviolet 615 Reagents

A fluorochrome designed to provide flexibility in panel design

Features

Excellent resolution of dim populations

Expanding multi-color options for 355 nm UV laser

Overall low impact on the resolution of most other fluorochromes

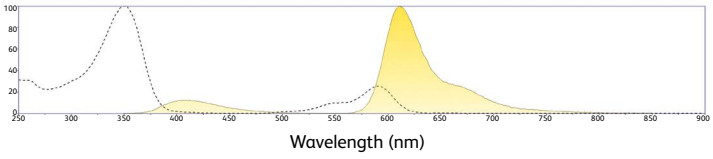


Figure 1. Excitation and emission profile for BD Horizon Brilliant™ BUV615 tandem dye

BUV615 Specification			
Ex_{max}	Em_{max}	Filter	Relative Brightness
350 nm	616 nm	610/20	■■■□ Bright

BD Horizon Brilliant™ Ultraviolet 615 (BUV615) is a tandem dye excited by the ultraviolet (355 nm) laser and has an emission maximum of 616 nm. BUV615 is a seventh dye choice for the UV laser, which allows an additional color to be considered for panel design, as it works well in combination with many other fluorochromes in a multicolor panel. The BUV615 dye was developed exclusively by BD Biosciences using polymer technology to provide stable, high quality reagents that are bright with minimal spillover.

BUV615 with an excitation maximum at 350 nm is a tandem fluorochrome that combines BD Horizon Brilliant™ Ultraviolet 395 (BUV395) and an acceptor dye with an emission maximum at 616 nm. BUV615 is designed for instruments equipped with an ultraviolet (355 nm) laser and a 610/20 filter.

BUV615 resolves antigens expressed at all resolution levels (Figure 2 and Figure 3). Spillover Spread Matrix (SSM) analysis reveals that BUV615 minimally impacts the resolution of most other fluorochromes. Furthermore, the resolution of BUV615 is minimally impacted by other fluorochromes (Figure 4).

Figure 2

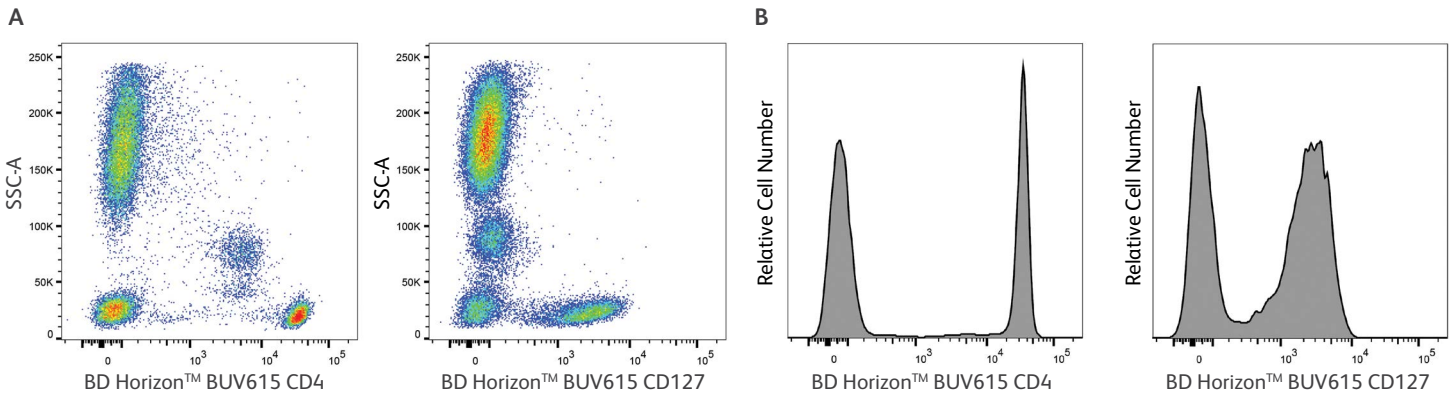


Figure 2. Staining of human lysed whole blood using BD Horizon BUV615 reagents

A. Human lysed whole blood was stained with BD Horizon BUV615 CD4 (left, clone SK3) or CD127 (right, clone H1L-7R-M21). B. Fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact lymphocytes.

Figure 3

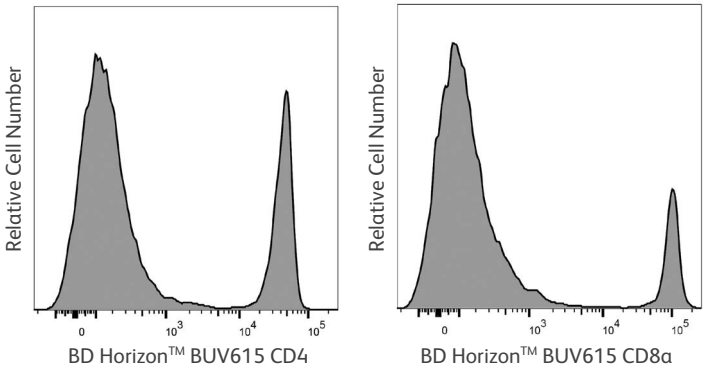


Figure 3. Staining of mouse splenocytes using BD Horizon BUV615 reagents

Balb/c splenocytes stained with BD Horizon BUV615 CD4 (left, clone GK1.5) or mCD8a (right, clone 53-6.7). Fluorescence histograms were derived from gated events with the forward and side light-scattering characteristics of intact leukocytes.

Figure 4

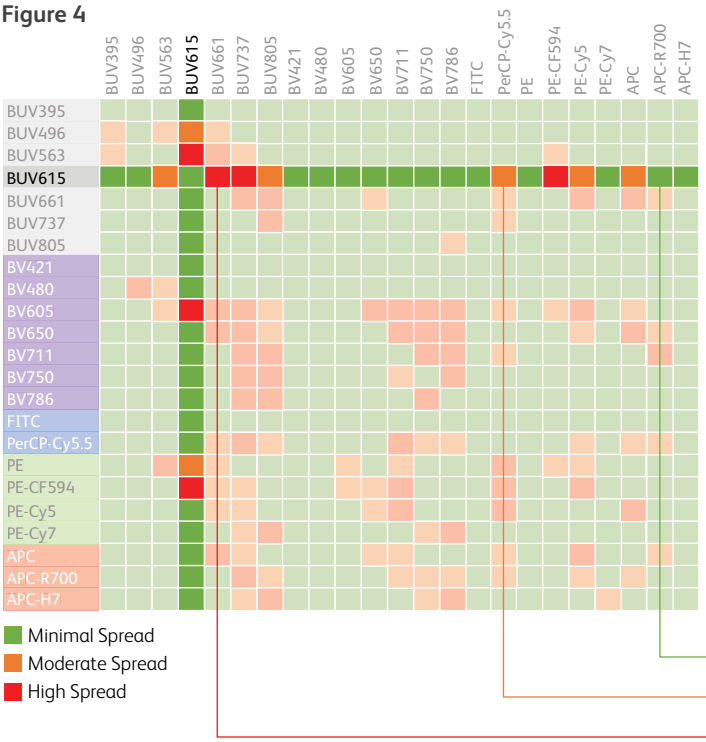
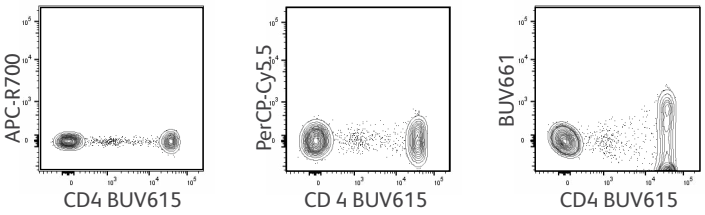


Figure 4. Representative spillover spread matrix (SSM)

Relatively low spread was measured from BUV615 into most other detectors and most other fluorochromes showed relatively low spread into the BUV615 detector.

Lysed whole blood was stained with mouse anti-human CD4 (clone SK3) antibodies conjugated with the indicated fluorochromes. Cells were examined on a BD FACSymphony™ cell analyzer and data was analyzed using FlowJo™ software. SSM values were color-coded based on an arbitrary scale defined upon spread visualization using bi-variate contour plots. For a given spillover spread value, the amount of spread is directly correlated to antigen density.



A selection of BD Horizon BUV615 research reagents*

To view a complete list of products, visit **bdbiosciences.com.**
For custom conjugations or bulk orders, email **BDB_Custom_Orders@bd.com** or visit **bdbiosciences.com/en-us/custom-reagents.**

Ordering information					
Reagent Specificity	Reactivity	Clone	Isotype	Size	Catalog Number
CD3	Human	UCHT1	Mouse IgG_1, κ	25 Tests	612993
				100 Tests	612992
CD4	Human	SK3	Mouse IgG_1, κ	25 Tests	612988
				100 Tests	612987
CD8	Human	SK1	Mouse IgG_1, κ	25 Tests	612995
				100 Tests	612994
CD19	Human	SJ25C1	Mouse IgG_1, κ	25 Tests	612990
				100 Tests	612989
CD25 (IL- 2Rα)	Human	2A3	Mouse IgG_1, κ	25 Tests	612997
				100 Tests	612996
CD56 (NCAM1)	Human	NCAM16.2	Mouse IgG_{2b}, κ	25 Tests	613002
				100 Tests	613001
CD194 (CCR4)	Human	1G1	Mouse IgG_1, κ	100 Tests	613000
CD129 (PD-1)	Human	EH12.1	Mouse IgG_1, κ	100 Tests	612991
CD4	Mouse	GK1.5	Rat IgG_{2a}, κ	50µg	613006
CD8α	Mouse	53-6.7	Rat IgG_{2a}, κ	50µg	613004

* Reagents available in most countries. Ask your BD Representative for more information.

BD OptiBuild™ On-demand Reagents

Hundreds of additional BUV615 antibody combinations will be continuously introduced through the BD OptiBuild™ On-demand reagent program, providing increased flexibility for panel design.

Class 1 Laser Product.
For Research Use Only. Not for use in diagnostic or therapeutic procedures.

23-22177-00

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