BD Horizon™ PE-CF594 Reagents

Features

- Improved brightness over PE-Texas Red®, ECD, and PE-Alexa Fluor® 610
- Excellent lot-to-lot consistency
- Maximizes choice and flexibility for multicolor panel design

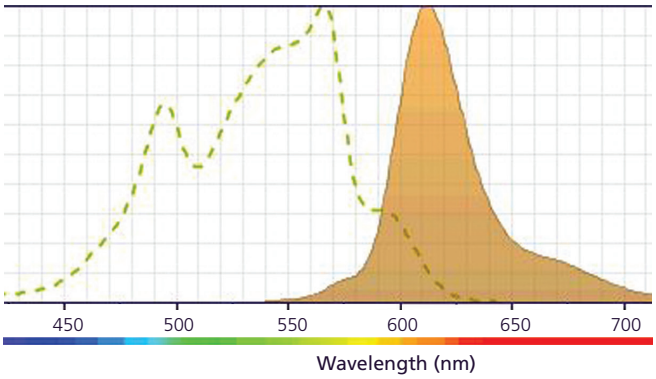

Figure 1. Absorption and emission spectra: Ex Max: 496 nm and 564 nm, Em Max: 612 nm.

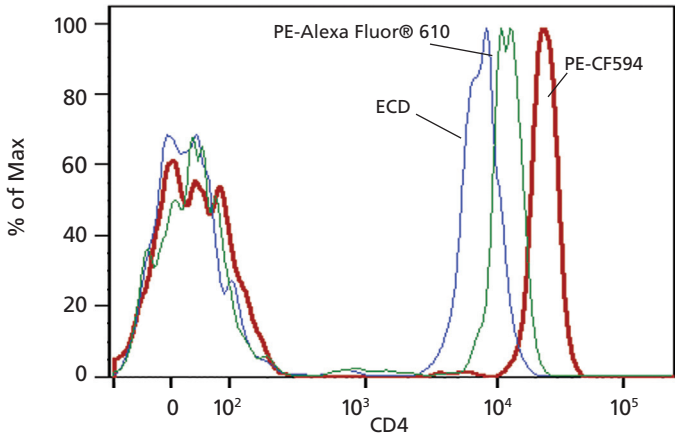

Figure 2. Lysed whole blood stained with human CD4 conjugated to PE-CF594, PE-Texas Red®, ECD*, or PE-Alexa Fluor® 610, run on a BD LSR II system (using a 610/20-nm filter and the 488-nm laser). All conjugates were run at the manufacturer's recommended concentration. Data shown was gated on lymphocytes.

* ECD is PE-Texas Red®-x, available from Beckman-Coulter.

BD Biosciences continues to expand the options for multicolor flow cytometry through the exclusive development of a dye for flow cytometers equipped with blue (488-nm), green (532-nm), or yellow-green (561-nm) lasers. The BD Horizon™ PE-CF594 dye has been developed to have improved brightness and spectral characteristics over other dyes in the PE-Texas Red® detector (610/20 nm). PE-CF594 also is stable in buffers used in typical surface and intracellular staining procedures.

A new choice for the blue, green, and yellow-green lasers

BD Horizon PE-CF594 is an analog of PE-Texas Red® and is the optimal alternative to this dye. Because PE has maximum excitations at 496 nm and 564 nm (Figure 1), PE-CF594 can be excited by blue, green, and yellow-green lasers. With a maximum emission at 612 nm, PE-CF594 is readily compatible with filter sets available for BD FACS™ brand cytometers equipped with blue, green, and yellow-green lasers, including the BD FACSCanto™ II flow cytometer, BD FACSAria™ cell sorter platform, BD Influx™ cell sorter, BD™ LSR cell analyzer platform, and the BD FACSVerse™ flow cytometer.

PE-CF594 allows you to take full advantage of your instrument capabilities with these lasers, increasing the power of your experiments. Using PE-CF594 in combination with other dyes offered by BD Biosciences allows you to detect 10 fluorescence parameters from a single sample.

Improved brightness and consistent spillover

BD Horizon PE-CF594 reagents maximize choice and flexibility by providing an additional bright dye that can be used in multicolor panels. PE-CF594 is brighter than other dyes currently offered for this detector with similar or lower background (Figure 2 and Table 1).

PE-CF594 reagents also exhibit consistent spillover values between lots and specificities, minimizing the need for lot specific compensation controls. Due to its emission spectra, PE-CF594 has significantly less spillover into the PerCP and PE-Cy™7 detectors than PE-Alexa Fluor® 610 (Table 1). These improved spectral characteristics make PE-CF594 an optimal choice for multicolor panels.

Compatible with standard surface and intracellular staining protocols

PE-CF594 is compatible with standard buffers used in surface and intracellular staining protocols. These reagents also demonstrate compatibility in paraformaldehyde-based fixatives and both EDTA and heparin blood collection tubes.

Visit **bdbiosciences.com/colors** for more information.

BD Horizon™ PE-CF594 Reagents

Wide portfolio of conjugates and convenient size options
BD Horizon PE-CF594 reagents are available in a broad array of specificities. These reagents also are available in multiple sizes to address a range of requirements: from 25-test sizes for multicolor panel pilot-scale experiments to 100-test sizes needed for routine assays. Bulk sizes and special packaging options also are available.

Tools to optimize setup, selection, and performance
To help advance the use of multicolor flow cytometry, BD Biosciences offers a growing library of tools and resources relevant to both experienced researchers and those new to multicolor panel design (bdbiosciences.com/colors). In addition to online resources, BD Biosciences offers one-on-one technical application support as part of our comprehensive customer services.

Description			Stain Index	% Spillover into Detector		
Specificity	Fluor	Clone		PE (575/26)	PerCP (695/40)	PE-Cy7 (780/60)
CD4	PE-CF594	RPA-T4	208	5.9	14.1	11.4
	ECD	SFCI12T4D11	72	8.4	13.4	10.1
	PE-Alexa Fluor® 610	S3.5	109	6.3	51.5	39.4
CD3	PE-CF594	UCHT1	296	5.5	14.0	11.4
	ECD	UCHT1	199	7.9	13.5	10.7
	PE-Alexa Fluor® 610	S4.1	157	6.2	52.3	40.2
	PE-Texas Red®	S4.1	107	8.1	14.4	11.8
CD19	PE-CF594	HIB19	87	6.0	14.1	11.5
	ECD	J3-119	72	8.3	13.8	11.2
	PE-Alexa Fluor® 610	SJ25-C1	65	5.4	52.9	39.2

Table 1. Stain Index and spillover value comparison. Lysed whole blood stained with human CD3, CD4, or CD19 conjugated to PE-CF594, PE-Texas Red®, ECD, or PE-Alexa Fluor® 610, run on a BD LSR II system (using a 610/20-nm filter and the blue laser). All conjugates were run at the manufacturer's recommended concentration. Data shown was gated on lymphocytes.

Ordering Information

BD Horizon PE-CF594 RUO Reagents

Description	React.	Clone	Isotype	Size	Cat. No.
CD2	Hu	RPA-2.10	Ms IgG_1, κ	25 tests	**562319**
				100 tests	**562300**
CD3	Hu	UCHT1	Ms IgG_1, κ	25 tests	**562310**
				100 tests	**562280**
CD4	Hu	RPA-T4	Ms IgG_1, κ	25 tests	**562316**
				100 tests	**562281**
CD8	Hu	RPA-T8	Ms IgG_1, κ	25 tests	**562311**
				100 tests	**562282**
CD14	Hu	MϕP9	Ms IgG_{2b}, κ	25 tests	**562334**
				100 tests	**562335**
CD19	Hu	HIB19	Ms IgG_1, κ	25 tests	**562321**
				100 tests	**562294**
CD20	Hu	2H7	Ms IgG_{2b}, κ	25 tests	**562322**
				100 tests	**562295**
CD27	Hu	M-T271	Ms IgG_1, κ	25 tests	**562324**
				100 tests	**562297**
CD28	Hu	CD28.2	Ms IgG_1, κ	25 tests	**562323**
				100 tests	**562296**
CD38	Hu	HIT2	Ms IgG_1, κ	25 tests	**562325**
				100 tests	**562288**
CD45	Hu	HI30	Ms IgG_1, κ	25 tests	**562312**
				100 tests	**562279**
CD45RA	Hu	HI100	Ms IgG_{2b}, κ	25 tests	**562326**
				100 tests	**562298**
CD45RO	Hu	UCHL1	Ms IgG_{2a}, κ	25 tests	**562327**
				100 tests	**562299**
CD56	Hu	B159	Ms IgG_1, κ	25 tests	**562328**
				100 tests	**562289**
CD62L	Hu	Dreg56	Ms IgG_1, κ	25 tests	**562330**
				100 tests	**562301**
HLA-DR	Hu	L243 (G46-6)	Ms IgG_{2a}, κ	25 tests	**562331**
				100 tests	**562304**

Description	React.	Clone	Isotype	Size	Cat. No.
CD3e	Ms	145-2C11	Hamster IgG_1, κ	25 µg	**562332**
				0.1 mg	**562286**
CD4	Ms	RM4-5	Rat IgG_{2a}, κ	25 µg	**562314**
				0.1 mg	**562285**
CD8a	Ms	53-6.7	Rat IgG_{2a}, κ	25 µg	**562315**
				0.1 mg	**562283**
CD11b	Ms	M1/70	Rat IgG_{2b}, κ	25 µg	**562317**
				0.1 mg	**562287**
CD19	Ms	1D3	Rat IgG_{2a}, κ	25 µg	**562329**
				0.1 mg	**562291**
CD45R/B220	Ms	RA3-6B2	Rat IgG_{2a}, κ	25 µg	**562313**
				0.1 mg	**562290**
IFN-γ	Ms	XMG1.2	Rat IgG_1, κ	25 µg	**562333**
				0.1 mg	**562303**
Streptavidin				25 µg	**562318**
				0.1 mg	**562284**

More than 100 PE-CF594 reagents are available for order and our portfolio continues to expand. Visit **bdbiosciences.com/colors** for the most up-to-date list of available products.

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