

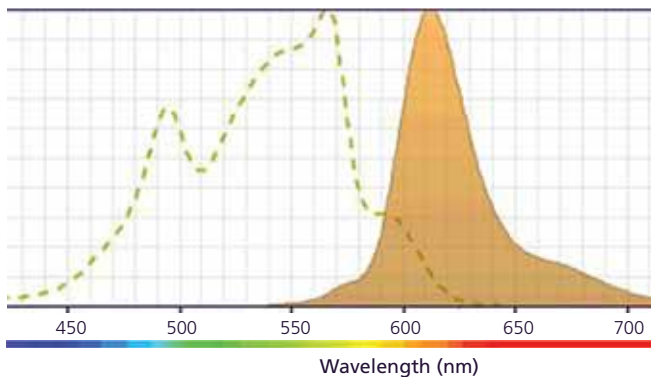
# BD Horizon™ PE-CF594 Reagents

## Features

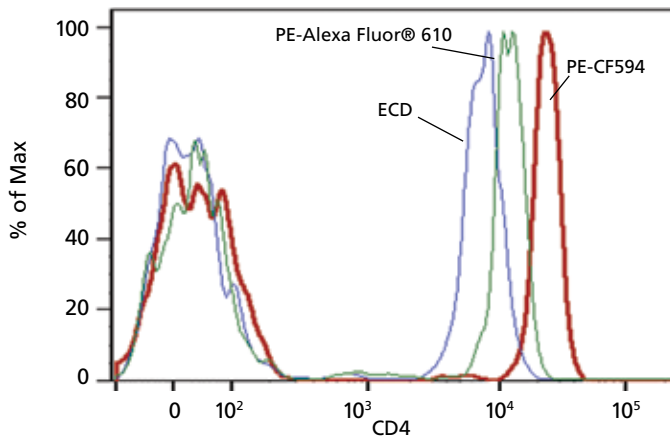
Improved brightness over PE-Texas Red®, ECD, and PE-Alexa Fluor® 610

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 new 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 FACSTM brand cytometers equipped with blue, green, and yellow-green lasers, including the BD FACSCanto™ II flow cytometer, BD FACSAria™ cell sorter platform, BD™ LSR cell analyzer platform, and the BD FACSVerser™ 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](http://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. Visit the product list at [bdbiosciences.com/colors](http://bdbiosciences.com/colors) to keep updated on our expanding portfolio.

## 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](http://bdbiosciences.com/colors)). In addition to online resources, BD Biosciences offers one-on-one technical application support as part of our comprehensive customer services.

## Ordering Information

BD Horizon PE-CF594 RUO Reagents

Description	React.	Clone	Isotype	Size	Cat. No.
CD2	Hu	RPA-2.10	Ms IgG <sub>1</sub> , κ	25 tests	562319
				100 tests	562300
CD3	Hu	UCHT1	Ms IgG <sub>1</sub> , κ	25 tests	562310
				100 tests	562280
CD4	Hu	RPA-T4	Ms IgG <sub>1</sub> , κ	25 tests	562316
				100 tests	562281
CD8	Hu	RPA-T8	Ms IgG <sub>1</sub> , κ	25 tests	562311
				100 tests	562282
CD14	Hu	MφP9	Ms IgG <sub>2b</sub> , κ	25 tests	562334
				100 tests	562335
CD19	Hu	HIB19	Ms IgG <sub>1</sub> , κ	25 tests	562321
				100 tests	562294
CD20	Hu	2H7	Ms IgG <sub>2b</sub> , κ	25 tests	562322
				100 tests	562295
CD27	Hu	M-T271	Ms IgG <sub>1</sub> , κ	25 tests	562324
				100 tests	562297
CD28	Hu	CD28.2	Ms IgG <sub>1</sub> , κ	25 tests	562323
				100 tests	562296
CD38	Hu	HIT2	Ms IgG <sub>1</sub> , κ	25 tests	562325
				100 tests	562288
CD45	Hu	HI30	Ms IgG <sub>1</sub> , κ	25 tests	562312
				100 tests	562279
CD45RA	Hu	HI100	Ms IgG <sub>2b</sub> , κ	25 tests	562326
				100 tests	562298
CD45RO	Hu	UCHL1	Ms IgG <sub>2a</sub> , κ	25 tests	562327
				100 tests	562299
CD56	Hu	B159	Ms IgG <sub>1</sub> , κ	25 tests	562328
				100 tests	562289
CD62L	Hu	Dreg56	Ms IgG <sub>1</sub> , κ	25 tests	562330
				100 tests	562301
HLA-DR	Hu	L243 (G46-6)	Ms IgG <sub>2a</sub> , κ	25 tests	562331
				100 tests	562304

Specificity	Description		Stain Index	% Spillover into Detector		
	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	SFC112T4D11	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.

Description	React.	Clone	Isotype	Size	Cat. No.
CD3e	Ms	145-2C11	Hamster IgG <sub>1</sub> , κ	25 µg	562332
				0.1 mg	562286
CD4	Ms	RM4-5	Rat IgG <sub>2a</sub> , κ	25 µg	562314
				0.1 mg	562285
CD8a	Ms	53-6.7	Rat IgG <sub>2a</sub> , κ	25 µg	562315
				0.1 mg	562283
CD11b	Ms	M1/70	Rat IgG <sub>2b</sub> , κ	25 µg	562317
				0.1 mg	562287
CD19	Ms	1D3	Rat IgG <sub>2a</sub> , κ	25 µg	562329
				0.1 mg	562291
CD45R/B220	Ms	RA3-6B2	Rat IgG <sub>2a</sub> , κ	25 µg	562313
				0.1 mg	562290
IFN-γ	Ms	XMG1.2	Rat IgG <sub>1</sub> , κ	25 µg	562333
				0.1 mg	562303
Hamster IgG <sub>1</sub> , κ		A19-3		0.1 mg	562307
Ms IgG <sub>1</sub> , κ		X40		0.1 mg	562292
Ms IgG <sub>2b</sub> , κ		27-35		0.1 mg	562305
Ms IgG <sub>2a</sub> , κ		G155-178		0.1 mg	562306
Rat IgG <sub>1</sub> , κ		R3-34		0.1 mg	562309
Rat IgG <sub>2b</sub> , κ		A95-1		0.1 mg	562308
Rat IgG <sub>2a</sub> , κ		R35-95		0.1 mg	562302
Streptavidin				25 µg	562318
				0.1 mg	562284



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