

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

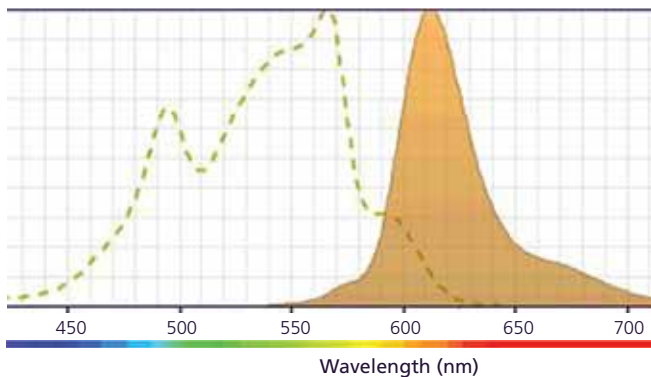


Figure 1. Absorption and emission spectra: Ex Max: 496 nm and 564 nm, Em Max: 612 nm.

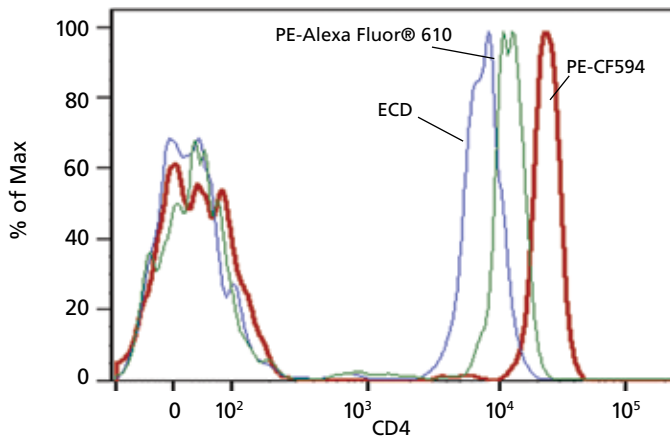


Figure 2. Lysed whole blood stained with human CD4 conjugated to PE-CF594, PE-Texas Red®, ECD*, or PE-Alexa Fluor® 610, run on a BD LSR II system (using a 610/20-nm filter and the 488-nm laser). All conjugates were run at the manufacturer's recommended concentration. Data shown was gated on lymphocytes.

* 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 FACSTM 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 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 fishersci.com/bdbiosciences 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 (fishersci.com/bdbiosciences). 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 ₁ , κ	25 tests	BDB562319
				100 tests	BDB562300
CD3	Hu	UCHT1	Ms IgG ₁ , κ	25 tests	BDB562310
				100 tests	BDB562280
CD4	Hu	RPA-T4	Ms IgG ₁ , κ	25 tests	BDB562316
				100 tests	BDB562281
CD8	Hu	RPA-T8	Ms IgG ₁ , κ	25 tests	BDB562311
				100 tests	BDB562282
CD14	Hu	MφP9	Ms IgG _{2b} , κ	25 tests	BDB562334
				100 tests	BDB562335
CD19	Hu	HIB19	Ms IgG ₁ , κ	25 tests	BDB562321
				100 tests	BDB562294
CD20	Hu	2H7	Ms IgG _{2b} , κ	25 tests	BDB562322
				100 tests	BDB562295
CD27	Hu	M-T271	Ms IgG ₁ , κ	25 tests	BDB562324
				100 tests	BDB562297
CD28	Hu	CD28.2	Ms IgG ₁ , κ	25 tests	BDB562323
				100 tests	BDB562296
CD38	Hu	HIT2	Ms IgG ₁ , κ	25 tests	BDB562325
				100 tests	BDB562288
CD45	Hu	HI30	Ms IgG ₁ , κ	25 tests	BDB562312
				100 tests	BDB562279
CD45RA	Hu	HI100	Ms IgG _{2b} , κ	25 tests	BDB562326
				100 tests	BDB562298
CD45RO	Hu	UCHL1	Ms IgG _{2a} , κ	25 tests	BDB562327
				100 tests	BDB562299
CD56	Hu	B159	Ms IgG ₁ , κ	25 tests	BDB562328
				100 tests	BDB562289

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.
CD62L	Hu	Dreg56	Ms IgG ₁ , κ	25 tests	BDB562330
				100 tests	BDB562301
HLA-DR	Hu	L243 (G46-6)	Ms IgG _{2a} , κ	25 tests	BDB562331
				100 tests	BDB562304
CD3e	Ms	145-2C11	Hamster IgG ₁ , κ	25 µg	BDB562332
				0.1 mg	BDB562286
CD4	Ms	RM4-5	Rat IgG _{2a} , κ	25 µg	BDB562314
				0.1 mg	BDB562285
CD8a	Ms	53-6.7	Rat IgG _{2a} , κ	25 µg	BDB562315
				0.1 mg	BDB562283
CD11b	Ms	M1/70	Rat IgG _{2b} , κ	25 µg	BDB562317
				0.1 mg	BDB562287
CD19	Ms	1D3	Rat IgG _{2a} , κ	25 µg	BDB562329
				0.1 mg	BDB562291
CD45R/B220	Ms	RA3-6B2	Rat IgG _{2a} , κ	25 µg	BDB562313
				0.1 mg	BDB562290
IFN-γ	Ms	XMG1.2	Rat IgG ₁ , κ	25 µg	BDB562333
				0.1 mg	BDB562303
Streptavidin				25 µg	BDB562318
				0.1 mg	BDB562284

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

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

CF™ is a trademark of Biotium, Inc.

Alexa Fluor® and Texas Red® are registered trademarks of Molecular Probes, Inc.

Cy™ is a trademark of Amersham Biosciences Corp. Cy™ dyes are subject to proprietary rights of Amersham Biosciences Corp and Carnegie Mellon University and are made and sold under license from Amersham Biosciences Corp only for research and in vitro diagnostic use. Any other use requires a commercial sublicense from Amersham Biosciences Corp, 800 Centennial Avenue, Piscataway, NJ 08855-1327, USA.

BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2012 BD BN1014122 23-14184-01

www.fishersci.com/bdbiosciences



For technical assistance, contact BD Biosciences.
Toll free: 877-232-8995
Email: ResearchApplications@bd.com



For customer service, call 1-800-766-7000.
To fax an order, use 1-800-926-1166.
To order online: www.fishersci.com