

Technical Data Sheet

PE-CF594 Mouse Anti-Human CD11c

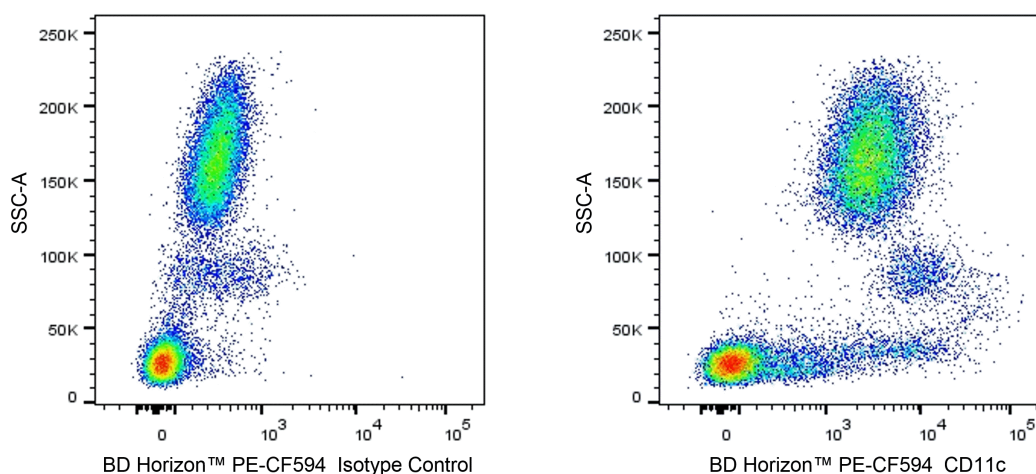
Product Information

Material Number:	566836
Alternate Name:	ITGAX; integrin alpha X; CD11c; p150 95 integrin alpha chain; SLEB6
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	BU15 (also known as BU-15; Bu-15)
Immunogen:	Human Synovial Fluid Dendritic Cells
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	III 256; V S143
Storage Buffer:	Aqueous buffered solution containing BSA and $\leq 0.09\%$ sodium azide.

Description

The BU15 monoclonal antibody specifically binds to CD11c, which is also known as Integrin alpha X (α X Integrin) or p150,95 Integrin alpha chain. CD11c is a ~150 kDa type I transmembrane glycoprotein that is encoded by *ITGAX* (Integrin subunit alpha X) which belongs to the integrin alpha chain family. It is variably expressed on monocytes, macrophages, granulocytes, NK cells, dendritic cells, and subsets of B and T cells. CD11c associates with CD18 (Integrin beta 2/ β 2 Integrin) to form the heterodimeric CD11c:CD18 complex, which is also known as p150,95 Integrin, or the Type 4 Complement Receptor (CR4). CD11c:CD18 binds to fibrinogen, iC3b, ICAM-1 (CD54), or lipopolysaccharide (LPS). CD11c:CD18 functions as an adhesion molecule that mediates cellular binding to ligands expressed on stimulated cells including epithelium and endothelium found during inflammation.

This antibody is conjugated to BD Horizon PE-CF594, which has been developed exclusively by BD Biosciences as a better alternative to PE-Texas Red®. PE-CF594 excites and emits at similar wavelengths to PE-Texas Red® yet exhibits improved brightness and spectral characteristics. Due to PE having maximal absorption peaks at 496 nm and 564 nm, PE-CF594 can be excited by the blue (488-nm), green (532-nm) and yellow-green (561-nm) lasers and can be detected with the same filter set as PE-Texas Red® (eg, 610/20-nm filter).



Multiparameter flow cytometric analysis of CD11c expression on human peripheral blood leucocyte populations. Human peripheral blood (collected with heparin as the preferred anticoagulant rather than EDTA) was stained with either BD Horizon™ PE-CF594 Mouse IgG1, κ Isotype Control (Cat. No. 562292; Left Plot) or BD Horizon™ PE-CF594 Mouse Anti-Human CD11c antibody (Cat. No. 566836; Right Plot) at 0.5 μ g/test. The erythrocytes were lysed with BD FACS™ Lysing Solution (Cat. No. 349202). The two-parameter pseudocolor density plot showing the correlated expression of CD11c (or Ig Isotype control staining) versus side light scatter signals (SSC-A) was derived from gated events with the forward and side light-scatter characteristics of intact leucocyte populations. Flow cytometry and data analysis were performed using a BD LSRFortessa™ X-20 Cell Analyzer System and FlowJo™ software. Data shown in this Technical Data Sheet are not lot specific.

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Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with BD Horizon™ PE-CF594 under optimum conditions, and unconjugated antibody and free PE-CF594 were removed.

Application Notes

Application

Flow cytometry

Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
562292	PE-CF594 Mouse IgG1, κ Isotype Control	0.1 mg	X40
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
5. When excited by the yellow-green (561-nm) laser, the fluorescence may be brighter than when excited by the blue (488-nm) laser.
6. Because of the broad absorption spectrum of the tandem fluorochrome, extra care must be taken when using multi-laser cytometers, which may directly excite both PE and CF™594.
7. Please observe the following precautions: Absorption of visible light can significantly alter the energy transfer occurring in any tandem fluorochrome conjugate; therefore, we recommend that special precautions be taken (such as wrapping vials, tubes, or racks in aluminum foil) to prevent exposure of conjugated reagents, including cells stained with those reagents, to room illumination.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
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11. Texas Red is a registered trademark of Molecular Probes, Inc., Eugene, OR.
12. Please refer to <http://regdocs.bd.com> to access safety data sheets (SDS).
13. Please refer to www.bdbiosciences.com/us/s/resources for technical protocols.

References

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