

Technical Data Sheet

PE-CF594 Hamster Anti-Mouse CD11c

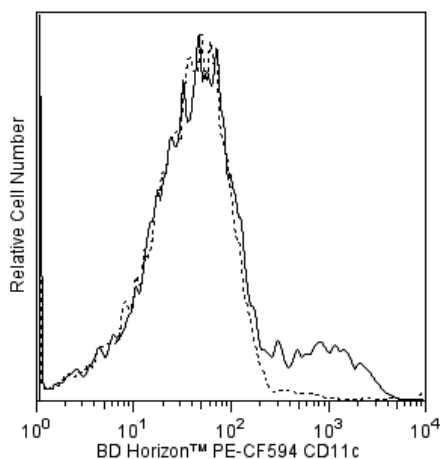
Product Information

Material Number:	562454
Alternate Name:	CD11c; Itgax; Integrin alpha-X; Integrin α X; Cr4; Complement receptor 4
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	HL3
Immunogen:	C57BL/6 Mouse Intestinal Intraepithelial Lymphocytes
Isotype:	Armenian Hamster IgG1, λ 2
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing BSA, protein stabilizer, and \leq 0.09% sodium azide.

Description

The HL3 monoclonal antibody specifically binds to the integrin α X chain of gp150, 95 (CD11c/CD18). CD11c is expressed on dendritic cells, CD4- CD8+ intestinal intraepithelial lymphocytes (IEL) and some NK cells. It is upregulated on IEL and lymph-node T cells following *in vivo* activation. Cells of the monocyte/macrophage lineage have been reported to express low levels of CD11c. CD11c plays a role in binding of iC3b.

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).



Flow cytometric analysis of CD11c expression on mouse dendritic cells. C57BL/6 mouse splenocytes were cultured with recombinant mouse GM-CSF (Cat. No. 554586; 5 ng/ml) overnight. The cells were then harvested and stained either with a BD Horizon™ PE-CF594 Hamster IgG1, λ 1 Isotype Control (Cat. No. 562521; dashed line histogram) or with the BD Horizon™ PE-CF594 Hamster Anti-Mouse CD11c antibody (Cat. No. 562454; solid line histogram). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable dendritic cells. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

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
562521	PE-CF594 Hamster IgG1, λ 1 Isotype Control	0.1 mg	G235-2356
554656	Stain Buffer (FBS)	500 ml	(none)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

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

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD



Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. 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.
5. 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.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
7. Texas Red is a registered trademark of Molecular Probes, Inc., Eugene, OR.
8. CF™ is a trademark of Biotium, Inc.
9. When excited by the yellow-green (561-nm) laser, the fluorescence may be brighter than when excited by the blue (488-nm) laser.
10. This product is provided under an Agreement between BIOTIUM and BD Biosciences. The manufacture, use, sale, offer for sale, or import of this product is subject to one or more patents or pending applications owned or licensed by Biotium, Inc. This product, and only in the amount purchased by buyer, may be used solely for buyer's own internal research, in a manner consistent with the accompanying product literature. No other right to use, sell or otherwise transfer (a) this product, or (b) its components is hereby granted expressly, by implication or by estoppel. This product is for research use only. Diagnostic uses require a separate license from Biotium, Inc. For information on purchasing a license to this product including for purposes other than research, contact Biotium, Inc., 3159 Corporate Place, Hayward, CA 94545, Tel: (510) 265-1027. Fax: (510) 265-1352. Email: btinfo@biotium.com.
11. 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.
12. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/documents/hamster_chart_11x17.pdf.
13. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

- Barclay NA, Brown MH, Birkeland ML, et al, ed. *The Leukocyte Antigen FactsBook*. San Diego, CA: Academic Press; 1997. (Biology)
- Burt BM, Plitas G, Stableford JA, Nguyen HM, Bamboat ZM, Pillarisetty VG, DeMatteo RP. CD11c identifies a subset of murine liver natural killer cells that responds to adenoviral hepatitis. *J Leukoc Biol*. 2008; 84(4):1039-1046. (Clone-specific: Flow cytometry)
- Gao JX, Liu X, Wen J, et al. Differentiation of monocytic cell clones into CD8 alpha+ dendritic cells (DC) suggests that monocytes can be direct precursors for both CD8 alpha+ and CD8 alpha- DC in the mouse. *J Immunol*. 2003; 170(12):5927-5935. (Biology)
- Huleatt JW, Lefrancois L. Antigen-driven induction of CD11c on intestinal intraepithelial lymphocytes and CD8+ T cells in vivo. *J Immunol*. 1995; 154(11):5684-5693. (Immunogen: Flow cytometry, Immunoprecipitation)
- Maraskovsky E, Brasel K, Teepe M, et al. Dramatic increase in the numbers of functionally mature dendritic cells in Flt3 ligand-treated mice: multiple dendritic cell subpopulations identified. *J Exp Med*. 1996; 184(5):1953-1962. (Biology)
- Pulendran B, Lingappa J, Kennedy MK, et al. Developmental pathways of dendritic cells in vivo: distinct function, phenotype, and localization of dendritic cell subsets in FLT3 ligand-treated mice. *J Immunol*. 1997; 159(5):2222-2231. (Biology)

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	800.979.9408	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country contact information, visit bdbiosciences.com/contact

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.

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

Unless otherwise noted, BD, BD Logo and all other trademarks are property of Becton, Dickinson and Company. © 2011 BD

