Technical Data Sheet

BV510 Hamster Anti-Mouse CD11c

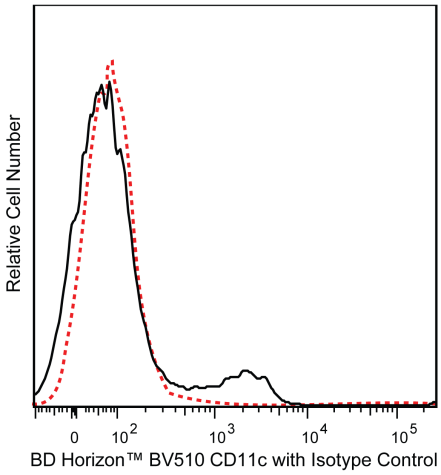
Product Information

Material Number:	**562949**
Alternate Name:	Cd11c; Itgax; Integrin alpha-X; Integrin αX; Cr4; Complement receptor 4
Size:	50 µg
Concentration:	0.2 mg/ml
Clone:	HL3
Immunogen:	C57BL/6 Mouse Intestinal Intraepithelial Lymphocytes
Isotype:	Armenian Hamster IgG1, λ2
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The HL3 monoclonal antibody specifically binds to the integrin αx 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.

The antibody was conjugated to BD Horizon™ BV510 which is part of the BD Horizon™ Brilliant Violet™ family of dyes. With an Ex Max of 405-nm and Em Max at 510-nm, BD Horizon™ BV510 can be excited by the violet laser and detected in the BD Horizon™ V500 (525/50-nm) filter set. BD Horizon™ BV510 conjugates are useful for the detection of dim markers off the violet laser.



Flow cytometric analysis of CD11c expression on mouse dendritic cells. *BALB/c 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™ BV510 Hamster IgG1, λ1 Isotype Control (Cat. No. 562954; dashed line histogram) or with the BD Horizon™ BV510 Hamster Anti-Mouse CD11c antibody (Cat. No. 562949; 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™ BV510 under optimum conditions, and unconjugated antibody and free BD Horizon™ BV510 were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 ml	(none)
562954	BV510 Hamster IgG1, λ1 Isotype Control	50 µg	G235-2356

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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. Brilliant Violet™ 510 is a trademark of Sirigen.
4. 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.
5. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
6. 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.
7. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
8. 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)

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