

Technical Data Sheet

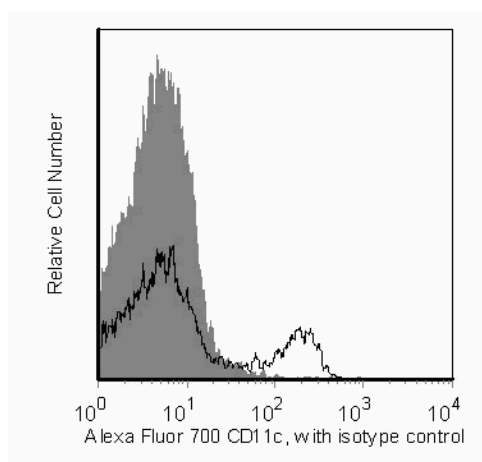
Alexa Fluor® 700 Hamster Anti-Mouse CD11c

Product Information

Material Number:	560583
Alternate Name:	Cd11c; Itgax; Integrin alpha-X; Integrin α X; Cr4; Complement receptor 4
Size:	50 μ g
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 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.



Flow cytometric analysis of CD11c on mouse dendritic cells. C57BL/6 splenocytes treated with 5 ng/mL GM-CSF (Cat. No. 554586) were stained either with a Alexa Fluor® 700 Hamster IgG1, λ 1 isotype control (Cat. No. 560552; shaded histogram) or with the Alexa Fluor® 700 Hamster Anti-Mouse CD11c antibody (Cat. No. 560521; unshaded histogram). Histograms were derived from gated events based on light scattering characteristics for dendritic cells. Flow cytometry was performed on a BD™ LSR II flow cytometry 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 to Alexa Fluor® 700 under optimum conditions, and unreacted Alexa Fluor® 700 was removed.

Application Notes

Application

Flow cytometry

Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
560555	Alexa Fluor® 700 Hamster IgG1, λ 1 Isotype Control	0.1 mg	G235-2356
554586	Recombinant Mouse GM-CSF	10 μ g	(none)
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2
553142	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.5 mg	2.4G2
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)

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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. 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.
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. Alexa Fluor® 700 has an adsorption maximum of ~700nm and a peak fluorescence emission of ~720nm. Before staining cells with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
6. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
7. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
9. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

- Burt BM, Plitas G, Stableford JA, et al. 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)
- 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: Immunoprecipitation)
- Larson RS, Springer TA. Structure and function of leukocyte integrins. *Immunol Rev.* 1990; 114:181-217. (Biology)
- 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)
- Metlay JP, Witmer-Pack MD, Agger R, Crowley MT, Lawless D, Steinman RM. The distinct leukocyte integrins of mouse spleen dendritic cells as identified with new hamster monoclonal antibodies. *J Exp Med.* 1990; 171(5):1753-1771. (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)