Technical Data Sheet

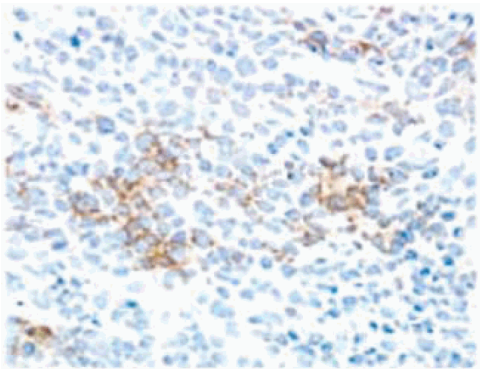
Purified Hamster Anti-Mouse CD11c

Product Information

Material Number:	**550283**
Alternate Name:	Cd11c; Itgax; Integrin alpha-X; Integrin αX; Cr4; Complement receptor 4
Size:	1.0 ml
Concentration:	125 µg/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, goat serum, and ≤0.09% sodium azide.

Description

The HL3 monoclonal antibody specifically binds to the integrin αx chain of gp150, 95 (CD11c/CD18) which is expressed on dendritic cells and CD4- CD8+ intestinal intraepithelial lymphocytes (IEL) and is upregulated on IEL and lymph-node T cells following *in vivo* activation. CD11c is also found on human NK cells. Although its expression on mouse NK cells is not published, we have detected CD11c on mouse splenic NK cells. Cells of the monocyte/macrophage lineage have been reported to express low levels of CD11c. CD11c plays a role in binding of iC3b.



Expression of CD11c on spleen dendritic cells. *The frozen section of normal mouse spleen was stained with HL3 mAb. Note the brown labeling of irregular-shaped cells in the red pulp surrounding lymphoid follicles.*

Preparation and Storage

Store undiluted at 4°C.

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

Application Notes

Application

Flow cytometry	Routinely Tested
Immunohistochemistry-frozen	Tested During Development
Immunohistochemistry-zinc-fixed	Not Recommended
Immunohistochemistry-paraffin	Not Recommended
Immunohistochemistry-formalin (antigen retrieval required)	Not Recommended

Recommended Assay Procedure:

Immunocytochemistry: The HL3 antibody is recommended to test for immunohistochemical staining of acetone-fixed frozen sections. Tissues tested were mouse spleen and thymus. **The clone HL3 is not recommended for zinc-fixed and formalin-fixed paraffin embedded sections.** The antibody stains the dendritic cells and NK cells. The isotype control recommended for use with this antibody is purified hamster IgG (Cat. No. 553951). For optimal indirect immunohistochemical staining, the HL3 antibody should be titrated (1:10 to 1:50 dilution) and visualized via a three-step staining procedure in combination with biotinylated anti-hamster cocktail (Cat. No. 550335) as the secondary antibody and Streptavidin-HRP (Cat. No. 550946) together with the DAB dectection system (Cat. No. 550880). More conveniently, the Anti-Hamster Ig HRP detection kit (Cat. No. 551012) that contains the biotinylated secondary antibody, antibody diluent, streptavidin-HRP and DAB substrate can be used for staining. **A detailed protocol of the immunohistochemical procedure is available at our website, http://www.bdbiosciences.com/support/resources**

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Suggested Companion Products

Catalog Number	Name	Size	Clone
553951	Purified Hamster IgG Isotype Control	0.5 mg	G235-2356
550335	Biotin Mouse Anti-Hamster IgG Cocktail	1.0 ml	G94-56
550946	Streptavidin HRP	50 ml	(none)
550880	DAB Substrate Kit	500 tests	(none)
551012	Anti-Hamster Ig HRP detection kit	200 tests	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. 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.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
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. This antibody has been developed for the immunohistochemistry application. However, a routine immunohistochemistry test is not performed on every lot. Researchers are encouraged to titrate the reagent for optimal performance.
6. An isotype control should be used at the same concentration as the antibody of interest.
7. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

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Larson RS, Springer TA. Structure and function of leukocyte integrins. *Immunol Rev.* 1990; 114:181-217. (Biology)

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