

## Technical Data Sheet

## Purified Hamster Anti-Mouse CD11c

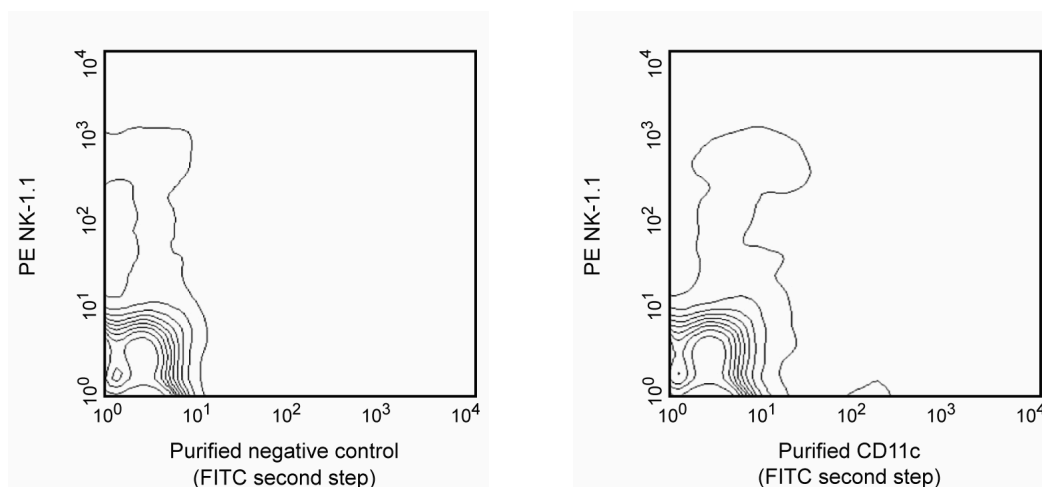
## Product Information

<b>Material Number:</b>	553799
<b>Alternate Name:</b>	Integrin $\alpha$ chain
<b>Size:</b>	0.5 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	HL3
<b>Immunogen:</b>	C57BL/6 Mouse Intestinal Intraepithelial Lymphocytes
<b>Isotype:</b>	Armenian Hamster IgG1, $\lambda$ 2
<b>Reactivity:</b>	QC Testing: Mouse
<b>Storage Buffer:</b>	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

## Description

The HL3 antibody reacts with the integrin  $\alpha$  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.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



**Expression of CD11c on spleen NK cells.** C57BL/6 splenocytes were stained simultaneously with PE-conjugated anti-mouse NK-1.1 mAb PK136 (Cat. No. 557391/553165) and either isotype control (left panel) or purified mAb HL3 (right panel), followed by FITC-conjugated anti-hamster IgG cocktail (Cat. No. 554011). Flow cytometry was performed on a BD FACScan™ flow cytometry system.

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4° C.

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## Application Notes

### Application

Flow cytometry	Routinely Tested
Immunoprecipitation	Reported
Immunohistochemistry-frozen	Reported
Immunohistochemistry-zinc-fixed	Not Recommended
Immunohistochemistry-formalin (antigen retrieval required)	Not Recommended

### Recommended Assay Procedure:

For IHC, we recommend the use of purified HL3 mAb in our special formulation for immunohistochemistry (Cat. No. 550283).

**Caution:** Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE™ (No Azide/Low Endotoxin) antibody format for in vitro and in vivo use.

### Suggested Companion Products

Catalog Number	Name	Size	Clone
554011	FITC Mouse Anti-Armenian and Syrian Hamster IgG Cocktail	0.5 mg	(none)
550283	Purified Hamster Anti-Mouse CD11c	1.0 ml	HL3
553951	Purified Hamster IgG Isotype Control	0.5 mg	G235-2356

### Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.
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/pharming/hamster\\_chart\\_11x17.pdf](http://www.bdbiosciences.com/pharming/hamster_chart_11x17.pdf).

### References

Barclay NA, Brown MH, Birkeland ML, et al, ed. *The Leukocyte Antigen FactsBook*. San Diego, CA: Academic Press; 1997.(Biology)  
Fagarasan S, Muramatsu M, Suzuki K, Nagaoka H, Hiai H, Honjo T. Critical roles of activation-induced cytidine deaminase in the homeostasis of gut flora. *Science*. 2002; 298(5597):1424-1427.(Clone-specific: Fluorescence microscopy)  
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)  
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.(Clone-specific: Immunohistochemistry)