Technical Data Sheet

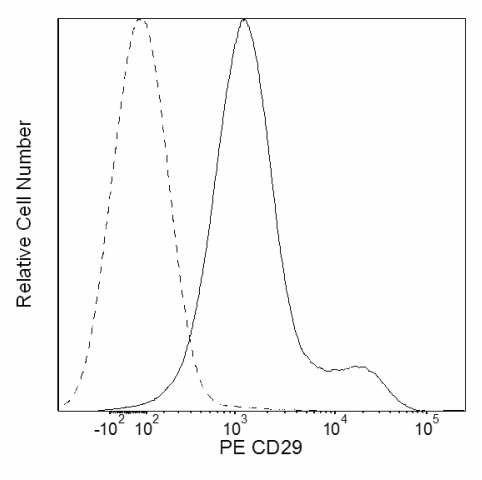
PE Hamster Anti-Mouse CD29

Product Information

Material Number:	**562801**
Alternate Name:	Itgb1; Integrin beta-1; Fnrb; gpIIa; VLA-4 subunit beta
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	HM β1-1
Immunogen:	Purified mouse VLA-4
Isotype:	Armenian Hamster IgG2, λ1
Reactivity:	QC Testing: Mouse Tested in Development: Rat
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The HMβ1-1 monoclonal antibody specifically binds to the 130-kDa integrin β1 chain (CD29). CD29 is expressed on the cell surface as a heterodimer with one of the distinct integrin-α chains. With α1 through α6 (CD49a through CD49f), it forms the VLA-1 through VLA-6 complexes, respectively, and with αv (CD51), it forms αvβ1 integrin. It also associates with the integrin α7 α8, and α9 chains in non-lymphoid tissues. As a result, CD29 has a broad tissue distribution, including lymphocytes, endothelia, smooth muscle, epithelia, and oocytes. This hamster mAb to a mouse leukocyte antigen has been observed to crossreact with similar populations of rat leukocytes. Source of the immunogen was purified mouse VLA-4 (α4β1, CD49d/CD29).



Flow cytometric analysis of CD29 on mouse splenocytes. *Splenocytes from BALB/c mice were stained either with a PE Hamster IgG2, λ Isotype Control (Cat. No. 553965; dashed line histogram) or with the PE Hamster Anti-Mouse CD29 antibody (Cat. No. 562801; solid line histogram). Flow cytometric histograms were derived from gated events with the forward and side light-scattering characteristics of viable 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 with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
553965	PE Hamster IgG2, λ1 Isotype Control	0.1 mg	Ha4/8
554656	Stain Buffer (FBS)	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. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
4. 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.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
6. Species testing during development may have been performed with a different format of the same clone. Selected applications have been tested for cross-reactivity.
7. 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.

References

Jacobsen K, Miyake K, Kincade PW, Osmond DG.. Highly restricted expression of a stromal cell determinant in mouse bone marrow in vivo. *J Exp Med.* 1992; 176(4):927-935. (Biology)

Mendrick DL, Kelly DM. Temporal expression of VLA-2 and modulation of its ligand specificity by rat glomerular epithelial cells in vitro. *Lab Invest.* 1993; 69(6):690-702. (Clone-specific: Blocking)

Noto K, Kato K, Okumura K, Yagita H. Identification and functional characterization of mouse CD29 with a mAb. *Int Immunol.* 1995; 7(5):835-842. (Immunogen: Blocking, Immunoprecipitation, Inhibition)

Springer TA. Adhesion receptors of the immune system. *Nature.* 1990; 346(6283):425-434. (Biology)

Wadsworth SA, Chang AC, Hong MJ, Halvorson MJ, Otto S, Coligan JE. Expression of a novel integrin beta 1 chain epitope and anti-beta 1 antibody-mediated enhancement of fibronectin binding are dependent on the stage of T cell differentiation. *J Immunol.* 1995; 154(5):2125-2133. (Biology)

Wu X, Miyake K, Medina KL, Kincade PW, Gimble JM. Recognition of murine integrin beta 1 by a rat anti-stromal cell monoclonal antibody. *Hybridoma.* 1994; 13(5):409-416. (Biology)

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