Technical Data Sheet

FITC Rat Anti-Mouse Integrin β7 Chain

Product Information

 Material Number:
 557497

 Alternate Name:
 Integrin βp

 Size:
 0.1 mg

 Concentration:
 0.5 mg/ml

 Clone:
 M293

Immunogen: αIELβ7 integrin from the C57BL/10 mouse T-cell hybridoma MTC-1

Isotype:Rat (LOU) IgG2a, κ Reactivity:QC Testing: Mouse

Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The M293 antibody reacts with the integrin β 7 chain (also known as integrin β p), which is found in association with either of two α chains. α 4 β 7 (LPAM-1) is expressed on most mature lymphocytes and on small subsets of thymic and bone marrow cells; it interacts with several ligands, including VCAM-1, fibronectin, and MAdCAM-1. α IEL β 7 is found primarily on intestinal mucosal and intraepithelial lymphocytes (IEL), and it may be primarily involved in interactions between IEL and epithelia *via* recognition of E-cadherin. The epitope recognized by the mAb M293 has been mapped to the region between amino acids 387 and 542. The M293 antibody exhibits little or no activity in blocking β 7 integrin-mediated adhesion.

Preparation and Storage

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

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Store undiluted at 4° C.

Application Notes

Application

Flow cytometry	Routine	y Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
553929	FITC Rat IgG2a, κ Isotype Control	0.25 mg	R35-95

Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 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.

References

Andrew DP, Berlin C, Honda S, et al. Distinct but overlapping epitopes are involved in alpha 4 beta 7-mediated adhesion to vascular cell adhesion molecule-1, mucosal addressin-1, fibronectin, and lymphocyte aggregation. *J Immunol.* 1194; 153(9):3847-3861.(Biology)

Berlin C, Berg EL, Briskin MJ, et al. Alpha 4 beta 7 integrin mediates lymphocyte binding to the mucosal vascular addressin MAdCAM-1. *Cell.* 1993; 74(1):185-195.(Biology)

Gabor MJ, Godfrey DI, Scollay R. Recent thymic emigrants are distinct from most medullary thymocytes. *Eur J Immunol.* 1997; 27(8):2010-2050.(Biology) Karecla PI, Green SJ, Bowden SJ, Coadwell J, Kilshaw PJ. Identification of a binding site for integrin alphaEbeta7 in the N-terminal domain of E-cadherin. *J Biol Chem.* 1996; 271(48):30909-30915.(Biology)

Kilshaw PJ, Murant SJ. Expression and regulation of beta 7(beta p) integrins on mouse lymphocytes: relevance to the mucosal immune system. Eur J Immunol. 1991; 21(10):2591-2597.(Immunogen)

Lefrancois L, Barrett TA, Havran WL, Puddington L. Developmental expression of the alpha IEL beta 7 integrin on T cell receptor gamma delta and T cell receptor alpha beta T cells. Eur J Immunol. 1994; 24(3):635-640.(Biology)

Roberts K, Kilshaw PJ. The mucosal T cell integrin alpha M290 beta 7 recognizes a ligand on mucosal epithelial cell lines. Eur J Immunol. 1993; 23(7):1630-1635. (Biology)

BD Biosciences

bdbiosciences.com

 United States
 Canada
 Europe
 Japan
 Asia Pacific
 Latin America/Caribbean

 877.232.8995
 888.259.0187
 32.53.720.550
 0120.8555.90
 65.6861.0633
 55.11.5185.9995

For country-specific contact information, visit bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited. For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2008 BD



557497 Rev. 13 Page 1 of 2

Tidswell M, Pachynski R, Wu SW. Structure-function analysis of the integrin beta 7 subunit: identification of domains involved in adhesion to MAdCAM-1. *J Immunol.* 1997; 159(3):1497-1505.(Biology)
Wagner N, Löhler J, Kunkel EJ, Ley K, Leung E, Krissansen G, Rajewsky K, Müller W. Critical role for beta7 integrins in formation of the gut-associated lymphoid tissue. *Nature.* 1996 July; 382(6589):366-370.(Biology)

557497 Rev. 13 Page 2 of 2