

Technical Data Sheet

FITC Rat Anti-Mouse CD106

Product Information

Material Number:	553332
Alternate Name:	VCAM-1
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	429 (MVCAM.A)
Immunogen:	Mouse preadipose cell line PA6
Isotype:	Rat (LEW) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 429 antibody reacts with both the long (~110 kDa) transmembrane-spanning form and the truncated (~47 kDa) GPI-linked form of vascular cell adhesion molecule-1 (VCAM-1, CD106). CD106 is constitutively expressed on bone marrow stromal cells, myeloid cells, and splenic dendritic cells. Its expression on endothelial cells is upregulated by inflammatory cytokines and in certain pathologic conditions. CD106 expression has also been detected on apoptotic thymocytes, splenocytes, and lymphoid cell lines. VCAM-1 is a counter-receptor for VLA-4 ($\alpha 4\beta 1$ integrin) and LPAM-1 ($\alpha 4\beta 7$ integrin), and the 429 antibody partially blocks VCAM-1-mediated binding functions. Source of the immunogen was mouse preadipose cell line PA6.

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 and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely 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.
2. Please refer to www.bdbiosciences.com/pharmingen/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.

References

Baron JL, Reich EP, Visintin I, Janeway CA Jr. The pathogenesis of adoptive murine autoimmune diabetes requires an interaction between alpha 4-integrins and vascular cell adhesion molecule-1. *J Clin Invest.* 1994; 93(4):1700-1708.(Biology)
 Bevilacqua MP. Endothelial-leukocyte adhesion molecules. *Annu Rev Immunol.* 1993; 11:767-804.(Biology)
 Ishiyama N, Kitagawa M, Takahashi H, Kina T, Hirokawa K. Expression of VCAM-1 in lymphocytes during the process of apoptosis. *Pathobiology.* 1998; 66(6):274-283.(Biology)
 Kinashi T, Springer TA. Adhesion molecules in hematopoietic cells. *Blood Cells.* 1994; 20(1):25-44.(Biology)
 Kinashi T, St Pierre Y, Springer TA. Expression of glycoposphatidylinositol-anchored and -non-anchored isoforms of vascular cell adhesion molecule 1 in murine stromal and endothelial cells. *J Leukoc Biol.* 1995; 57(1):168-173.(Immunogen)
 Koni PA, Joshi SK, Temann UA, Olson D, Burkly L, Flavell RA. Conditional vascular cell adhesion molecule 1 deletion in mice: impaired lymphocyte migration to bone marrow. *J Exp Med.* 2001; 193(6):741-754.(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

