

### CD106 / VCAM1 (Activated Endothelial Cell Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone B-K9]
Catalog # AH12507

#### **Specification**

## CD106 / VCAM1 (Activated Endothelial Cell Marker) Antibody - With BSA and Azide - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

,3,4,
P19320
7412, 109225
Human
Mouse
Monoclonal
Mouse / IgG1, kappa

Calculated MW 110kDa KDa

## CD106 / VCAM1 (Activated Endothelial Cell Marker) Antibody - With BSA and Azide - Additional Information

**Gene ID 7412** 

#### **Other Names**

Vascular cell adhesion protein 1, V-CAM 1, VCAM-1, INCAM-100, CD106, VCAM1, L1CAM

#### **Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

#### **Precautions**

CD106 / VCAM1 (Activated Endothelial Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

## CD106 / VCAM1 (Activated Endothelial Cell Marker) Antibody - With BSA and Azide - Protein Information

#### Name VCAM1

#### **Function**

Cell adhesion glycoprotein predominantly expressed on the surface of endothelial cells that plays an important role in immune surveillance and inflammation (PubMed:<a href="http://www.uniprot.org/citations/31310649" target="\_blank">31310649</a>). Acts as a major regulator of leukocyte adhesion to the endothelium through interaction with different types of integrins (PubMed:<a href="http://www.uniprot.org/citations/10209034" target="\_blank">10209034</a>). During inflammatory responses, binds ligands on the surface of activated endothelial cells to initiate the activation of calcium channels and the plasma membrane-associated small GTPase RAC1 leading to leukocyte transendothelial migration (PubMed:<a href="http://www.uniprot.org/citations/22970700" target="\_blank">22970700</a>). Serves also as a quality- control checkpoint for entry into bone marrow by providing a 'don't-eat-me' stamping in the context of major histocompatibility complex (MHC) class-I presentation



(PubMed:<a href="http://www.uniprot.org/citations/35210567" target=" blank">35210567</a>).

#### **Cellular Location**

[Vascular cell adhesion protein 1]: Cell membrane; Single-pass type I membrane protein

#### **Tissue Location**

Expressed on inflamed vascular endothelium, as well as on macrophage-like and dendritic cell types in both normal and inflamed tissue

### CD106 / VCAM1 (Activated Endothelial Cell Marker) Antibody - With BSA and Azide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CD106 / VCAM1 (Activated Endothelial Cell Marker) Antibody - With BSA and Azide - Images

# CD106 / VCAM1 (Activated Endothelial Cell Marker) Antibody - With BSA and Azide - Background

Recognizes a protein of 110kDa, identified as CD106 (also known as vascular cell adhesion molecule-1 (VCAM-1) and INCAM-100). CD106 is a member of the lg superfamily of adhesion molecules and is expressed at high levels on cytokine stimulated vascular endothelial cells, and at minimal levels on un-stimulated endothelial cells. It is also present on follicular and inter-follicular dendritic cells of lymph nodes, myoblasts, and some macrophages. CD106 serves as a ligand for leukocyte integrin (VLA-4 or CD49d/CD29) and mediates cell adhesion of leukocytes to activated endothelium. It plays a role in various immunological and inflammatory responses. This MAb inhibits the binding of leukocytes to VCAM-1 on stimulated endothelial cells.

## CD106 / VCAM1 (Activated Endothelial Cell Marker) Antibody - With BSA and Azide - References

Schlossman SF et al. eds. Leukocyte Typing V, p1764-1767, Oxford University Press, Oxford, 1995. | Vermot-Desroches C et al. Heterogeneity of antigen expression among human umbilical cord vascular endothelial cells: identification of cell subsets by co-expression of haemopoietic antigens. Immunol Lett 1995, 48(1):1-9 | Rice GE et al. Vascular and nonvascular expression of INCAM-110. A target for mononuclear leukocyte adhesion in normal and inflamed human tissues. Am J Pathol 1991, 138(2):385-393 | Huang MJ et al. Expression of vascular cell adhesion molecule-1 by follicular dendritic cells. Leuk Lymphoma 1995, 18(3-4):259-264. | Rosen GD et al. Roles for the integrin VLA-4 and its counter receptor VCAM-1 in myogenesis. Cell 1992, 69(7):1107-1119 | Bevilacqua MP. Endothelial-leukocyte adhesion molecules. Annu Rev Immunol 1993;11:767-804 | Foster CA. VCAM-1/alpha 4-integrin adhesion pathway: therapeutic target for allergic inflammatory disorders. J Allergy Clin Immunol 1996, 98(6 Pt 2):S270-277