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VCAM1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1398a

Specification

VCAM1 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P19320
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**81kDa KDa**

Description
This gene is a member of the Ig superfamily and encodes a cell surface sialoglycoprotein expressed by cytokine-activated endothelium. This type I membrane protein mediates leukocyte-endothelial cell adhesion and signal transduction, and may play a role in the development of artherosclerosis and rheumatoid arthritis. Two alternatively spliced transcripts encoding different isoforms have been described for this gene.Tissue specificity: Expressed on inflamed vascular endothelium, as well as on macrophage-like and dendritic cell types in both normal and inflamed tissue.INVITROGEN: CD106 is expressed on bone marrow stromal cells, myeloid cells, and endothelial cells.

Immunogen
Purified recombinant fragment of human VCAM1 expressed in E. Coli.

Formulation
Ascitic fluid containing 0.03% sodium azide.

VCAM1 Antibody - Additional Information

Gene ID 7412

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

Dilution
WB~~1/500 - 1/2000
IHC~~1/500 - 1/2000

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
VCAM1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

VCAM1 Antibody - 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:31310649). Acts as a major regulator of leukocyte adhesion to the endothelium through interaction with different types of integrins (PubMed:10209034). 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:22970700). 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:35210567).

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

VCAM1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

VCAM1 Antibody - Images

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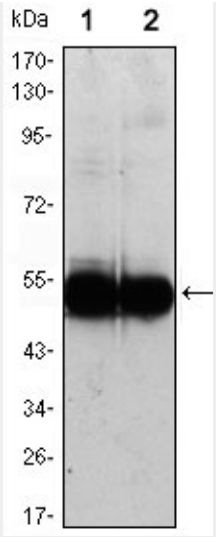

Figure 1: Western blot analysis using VCAM1 mouse mAb against HUVEC (1) and EC (2) cell lysate.

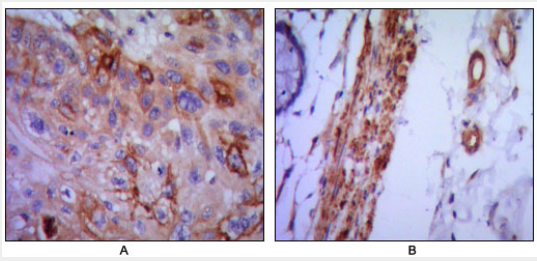

Figure 2: Immunohistochemical analysis of paraffin-embedded human lung cancer (A) and colon cancer (B) using VCAM1 mouse mAb with DAB staining.

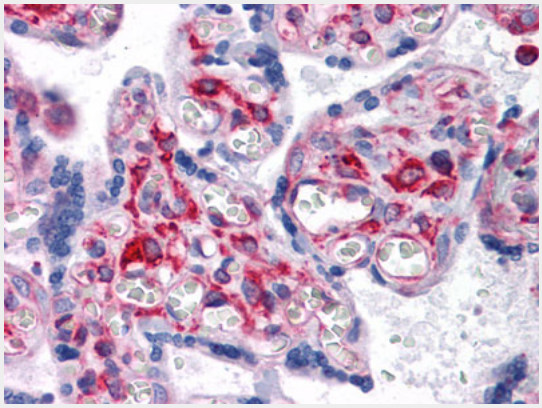

Figure 3: Immunohistochemical analysis of paraffin-embedded human Placenta tissues using VCAM1 mouse mAb

VCAM1 Antibody - References

1. Cell Adh Migr. 2009 Oct;3(4):369-72. 2. Arthritis Rheum. 2010 Jan;62(1):105-16.