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VCAM1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1398a

Product Information

Application	WB, IHC, E
Primary Accession	P19320
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	6G9
Isotype	IgG1
Calculated MW	81276
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.

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 E~~N/A
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.

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). Also serves 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

References

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

Images

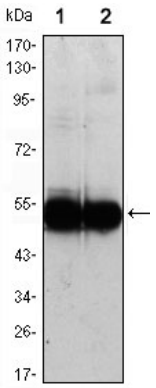


Figure 1: Western blot analysis using VCAM1 mouse mAb against HUVEC (1) and EC (2) cell lysate.

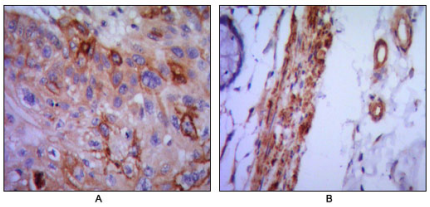


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung cancer (A) and colon cancer (B) using VCAM1 mouse mAb with DAB staining.

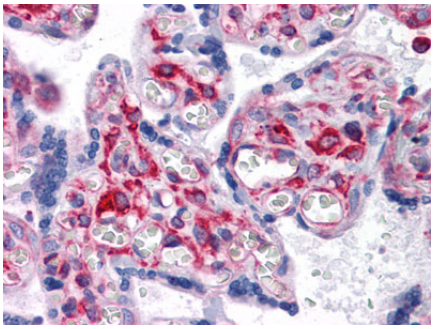


Figure 3: Immunohistochemical analysis of paraffin-embedded human Placenta tissues using VCAM1 mouse mAb

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.