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VCAM1 / CD106 Antibody (clone 6G9)

Mouse Monoclonal Antibody
Catalog # ALS13207

Specification

VCAM1 / CD106 Antibody (clone 6G9) - Product Information

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

VCAM1 / CD106 Antibody (clone 6G9) - Additional Information

Gene ID 7412

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

Target/Specificity
Human VCAM1

Reconstitution & Storage
Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
VCAM1 / CD106 Antibody (clone 6G9) is for research use only and not for use in diagnostic or therapeutic procedures.

VCAM1 / CD106 Antibody (clone 6G9) - 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

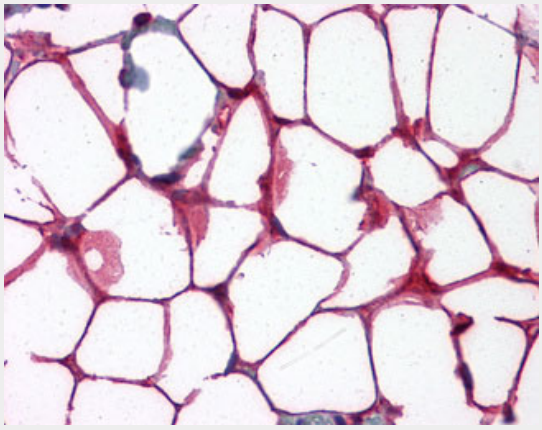
Volume
50 µl

VCAM1 / CD106 Antibody (clone 6G9) - Protocols

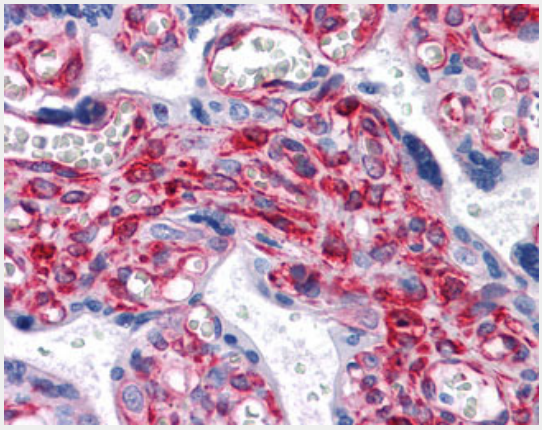
Provided below are standard protocols that you may find useful for product applications.

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

VCAM1 / CD106 Antibody (clone 6G9) - Images



Anti-VCAM1 antibody IHC of human colon, adipocytes.



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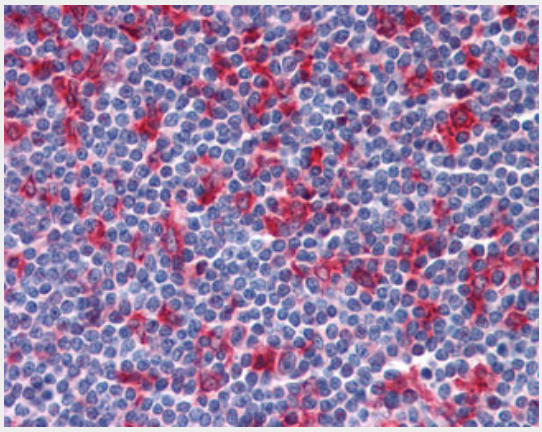
Anti-VCAM1 antibody IHC of human placenta.



Anti-VCAM1 antibody IHC of human tonsil.

VCAM1 / CD106 Antibody (clone 6G9) - Background

Important in cell-cell recognition. Appears to function in leukocyte-endothelial cell adhesion. Interacts with integrin alpha-4/beta-1 (ITGA4/ITGB1) on leukocytes, and mediates both adhesion and signal transduction. The VCAM1/ITGA4/ITGB1 interaction may play a pathophysiologic role both in immune responses and in leukocyte emigration to sites of inflammation.

VCAM1 / CD106 Antibody (clone 6G9) - References

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Polte T.,et al.Nucleic Acids Res. 18:5901-5901(1990).
Hession C.,et al.J. Biol. Chem. 266:6682-6685(1991).
Cybulsky M.I.,et al.Proc. Natl. Acad. Sci. U.S.A. 88:7859-7863(1991).
Ota T.,et al.Nat. Genet. 36:40-45(2004).