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

Mouse Monoclonal Antibody [Clone 1.4C3]
Catalog # AH12502

Product Information

Application	IHC, IF, FC
Primary Accession	P19320
Other Accession	7412, 109225
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	1.4C3
Calculated MW	81276

Additional Information

Gene ID	7412
Other Names	Vascular cell adhesion protein 1, V-CAM 1, VCAM-1, INCAM-100, CD106, VCAM1, L1CAM
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
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.

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

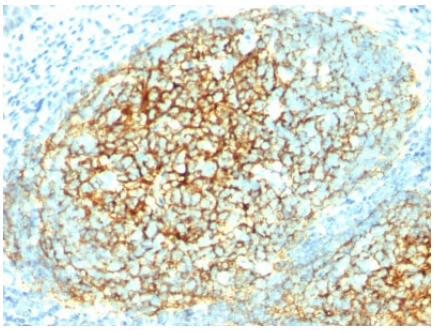
Background

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 Ig 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.

References

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

Images



Formalin-fixed, paraffin-embedded human Tonsil stained with CD106 Monoclonal Antibody (1.4C3).