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CD106 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51910

Product Information

Application	WB
Primary Accession	P19320
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
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
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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

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.

References

Osborn L.,et al.Cell 59:1203-1211(1989).
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).