

Rabbit VCAM1/Cd106 Polyclonal Antibody | anti-Vcam1 antibody

Anti-VCAM1/Cd106 Picoband Antibody

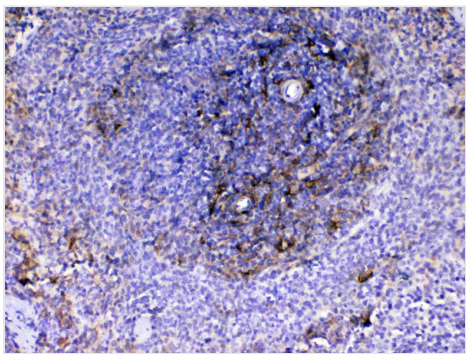
CATALOG # AAA124627	HOST Rabbit	REACTIVITY Mouse, Rat No cross reactivity with other proteins.	APPLICATIONS Western Blot, Immunohistochemistry, ELISA
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PRODUCT SYNONYMS

VCAM1/Cd106; Polyclonal Antibody; Anti-VCAM1/Cd106 Picoband Antibody; Vascular cell adhesion protein 1; V-CAM 1; VCAM-1; CD106; Vcam1; Vcam-1; anti-Vcam1 antibody

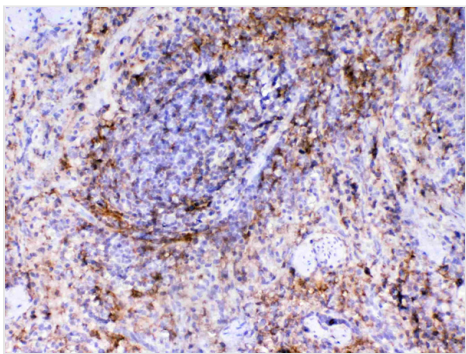
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat No cross reactivity with other proteins.
Clonality	Polyclonal
Purity/Purification	Immunogen affinity purified
Form/Format	Lyophilized
Concentration	Add 0.2ml of distilled water will yield a concentration of 500ug/ml. (varies by lot)
Sequence Length	345
Applicable Applications for anti-Vcam1 antibody	WB (Western Blot), IHC (Immunohistochemistry), ELISA
Immunogen	E Coli-derived mouse VCAM1 recombinant protein (Position: F25-L270).
Subcellular Localization	Isoform 1: Cell membrane; Single-pass type I membrane protein.
Tissue Specificity	Expressed on inflamed vascular endothelium, as well as on macrophage-like and dendritic cell types in both normal and inflamed tissue. Expressed in the bone marrow.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



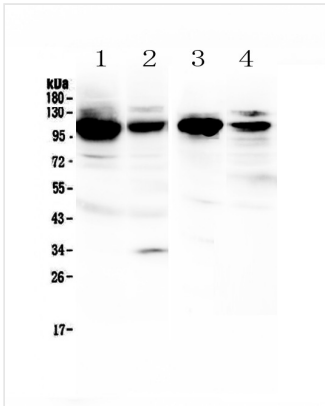
IHC (Immunohistochemistry)

Figure 3. IHC analysis of VCAM1 using anti-VCAM1 antibody (AAA124627).VCAM1 was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-VCAM1 Antibody (AAA124627) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of VCAM1 using anti-VCAM1 antibody (AAA124627).VCAM1 was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-VCAM1 Antibody (AAA124627) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of VCAM1 using anti-VCAM1 antibody (AAA124627).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: mouse spleen tissue lysates,Lane 2: mouse lung tissue lysates,Lane 3: rat spleen tissue lysates,Lane 4: rat lung tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-VCAM1 antigen affinity purified polyclonal antibody at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for VCAM1 at approximately 110KD. The expected band size for VCAM1 is at 81KD.

ADDITIONAL INFORMATION

Related Product Information for anti-Vcam1 antibody	Description: CD106(cluster of differentiation 106) also known as vascular cell adhesion molecule 1(VCAM-1), is a protein that in humans is encoded by the VCAM1 gene. In inflammatory conditions and in cardiac allografts undergoing rejection, VCAM1 is upregulated in endothelium of postcapillary venules. Arterial expression of VCAM1 is also found in experimental models of atherosclerosis in the rabbit. This gene is mapped to chromosome 1 by Southern analysis of somatic cell hybrids. VCAM-1 functions as a cell adhesion molecule. The VCAM-1 protein mediates the adhesion of lymphocytes, monocytes, eosinophils, andbasophils to vascularendothelium. It also functions in leukocyte-endothelial cell signal transduction, and it may play a role in the development ofatherosclerosis and rheumatoid arthritis. CAM741 works similar to cotransin in that it represses the biosynthesis ofVCAM1 cells by blocking the process of cotranslational translocation, which is dependent on the signal peptide ofVCAM1. Among the lung metastasis signature genes identified, several, includingVCAM1, were functionally validated. Protein Function: 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.
Product Categories/Family for anti-Vcam1 antibody	Signal Transduction; Cytoskeleton/ECM; Cell Adhesion; cell adhesion molecules; vascular; Signal Transduction; endothelial; Neuroscience; Neurology Process; Neural Signal Transduction; Stem Cells; Mesenchymal Stem Cells; Surface Molecules; Cancer; Invasion

NCBI AND UNIPROT INFORMATION

NCBI GI #	267283
NCBI GeneID	22329
UniProt Accession #	P29533
Molecular Weight	38,372 Da
NCBI Official Full Name	Vascular cell adhesion protein 1
NCBI Official Synonym Full Names	vascular cell adhesion molecule 1
NCBI Official Symbol	Vcam1
NCBI Official Synonym Symbols	CD106; Vcam-1
NCBI Protein Information	vascular cell adhesion protein 1
UniProt Protein Name	Vascular cell adhesion protein 1
UniProt Gene Name	Vcam1
UniProt Synonym Gene Names	Vcam-1; V-CAM 1; VCAM-1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.