For Research Use Only

VCAM-1/CD106 Recombinant antibody, PBS Only (Capture)

Catalog Number:84249-4-PBS



Basic Information

Catalog Number: GenBank Accession Number: 84249-4-PBS NM_001078.4

Concentration: GeneID (NCBI): 1 mg/ml 7412

Source: UNIPROT ID: Rabbit P19320-1 Isotype: Full Name:

IgG vascular cell adhesion molecule 1

Calculated MW: 81 kDa Observed MW: 100 kDa Purification Method: Protein A purification

CloneNo.: 241284B2

Applications

Tested Applications:

WB, IHC, IF-P, Cytometric bead array, Sandwich ELISA,

Indirect ELISA, Sample test

Species Specificity:

human

Background Information

Vascular cell adhesion molecule 1 (VCAM1), also known as CD106, is a 110-kDa transmembrane glycoprotein belonging to the immunoglobulin gene superfamily. VCAM1 is expressed by cytokine-activated endothelium, interacts with integrin VLA4 ($^{\alpha}$ 4 $^{\beta}$ 1) present on the surface of leukocytes, and mediates both adhesion and signal transduction. It is also expressed either constitutively or inducibly in a variety of other cell types, including vascular smooth muscle cells, differentiating skeletal muscle cells, renal and neural epithelial cells, macrophages (Kupffer cells), dendritic cells, and bone marrow stromal cells (PMID: 7507076, 11359843).

Storage

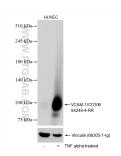
Storage:

Store at -80°C.

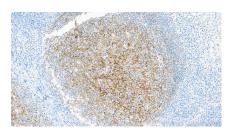
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C $\,$

Storage Buffer: PBS only, pH7.3

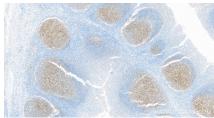
Selected Validation Data



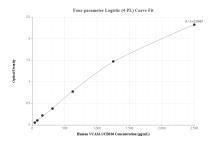
TNF alpha treated HUVEC cells were subjected to SDS PAGE followed by western blot with 84249-4-RR (VCAM-1/CD106 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84249-4-PBS in a different storage buffer formulation.



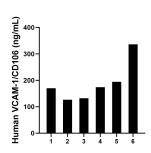
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 84249-4-RR (VCAM-1/CD106 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84249-4-PBS in a different storage buffer formulation.



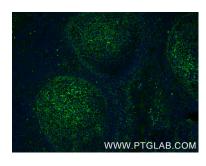
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 84249-4-RR (VCAM-1/CD106 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84249-4-PBS in a different storage buffer formulation.



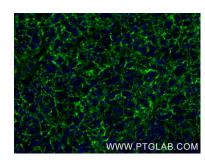
Sandwich ELISA standard curve of MP01145-3, Human VCAM-1/CD106 Recombinant Matched Antibody Pair - PBS only. 84249-4-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard RP02345. 84249-2-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL



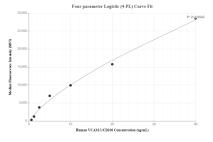
Serum of six individual healthy human donors was measured. The human VCAM-1/CD106 concentration of detected samples was determined to be 188.79 ng/mL with a range of 126.68 - 336.06 ng/ml



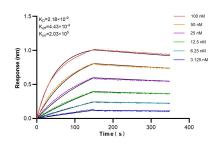
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human tonsilitis tissue using VCAM-1/CD106 antibody (84249-4-RR, Clone: 241284B2) at dilution of 1:500 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84249-4-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human tonsillitis tissue using VCAM-1/CD106 antibody (84249-4-RR, Clone: 241284B2) at dilution of 1:500 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84249-4-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP01145-3, VCAM-1/CD106 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84249-4-PBS. Detection antibody: 84249-2-PBS. Standard: RP02345. Range: 0.625-40 ng/mL



Biolayer interferometry (BLL) kinetic assays of 84249-4-RR against Human VCAM-1/CD106 were performed. The affinity constant is 2.18 nM.