

For Research Use Only

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

Catalog Number: 84249-4-PBS



Basic Information

Catalog Number: 84249-4-PBS	GenBank Accession Number: NM_001078.4	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 7412	CloneNo.: 241284B2
Source: Rabbit	UNIPROT ID: P19320-1	
Isotype: IgG	Full Name: vascular cell adhesion molecule 1	
	Calculated MW: 81 kDa	
	Observed MW: 100 kDa	

Applications

Tested Applications:
WB, IHC, IF-P, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human

Product Information

84249-4-PBS targets VCAM-1/CD106 as part of a matched antibody pair:

MP01145-3: 84249-4-PBS capture and 84249-2-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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

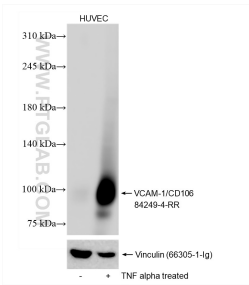
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

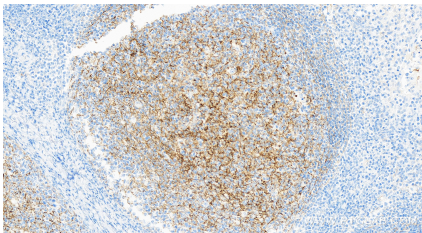
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

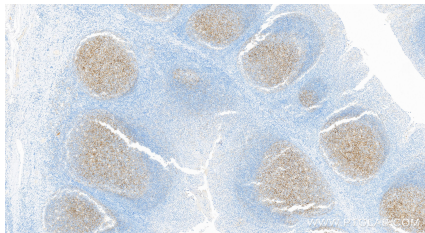
Selected Validation Data



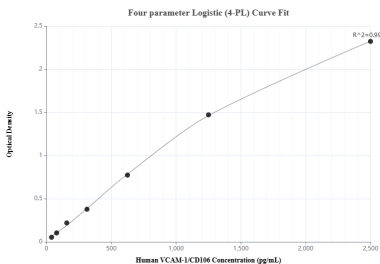
TNF alpha treated HUVEC cells were subjected to SDS PAGE followed by western blot with 84249-4-RR (VCAM-1/CD106 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84249-4-PBS in a different storage buffer formulation.



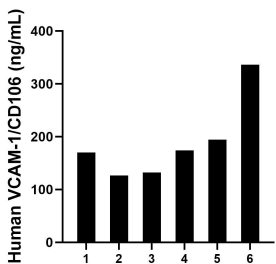
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 84249-4-RR (VCAM-1/CD106 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84249-4-PBS in a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



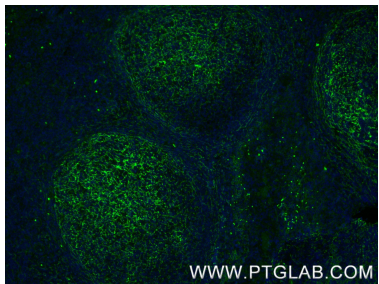
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 84249-4-RR (VCAM-1/CD106 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84249-4-PBS in a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



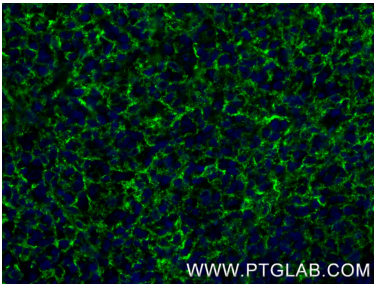
Sandwich ELISA standard curve of MP01145-3, Human VCAM-1/CD106 Recombinant Matched Antibody Pair - PBS only. 84249-4-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard RP02345. 84249-2-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL



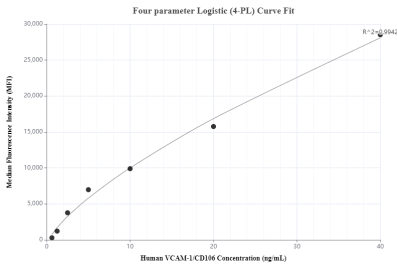
Serum of six individual healthy human donors was measured. The human VCAM-1/CD106 concentration of detected samples was determined to be 188.79 ng/mL with a range of 126.68 - 336.06 ng/mL



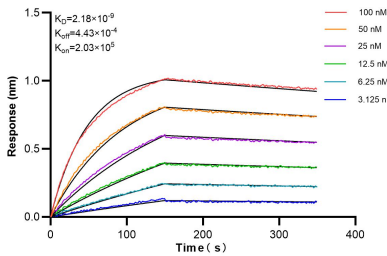
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human tonsillitis tissue using VCAM-1/CD106 antibody (84249-4-RR, Clone: 241284B2) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This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



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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



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