

For Research Use Only

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

Catalog Number: 84249-4-PBS



## Basic Information

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

## Applications

**Tested Applications:**  
WB, IHC, 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

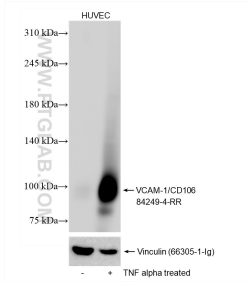
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

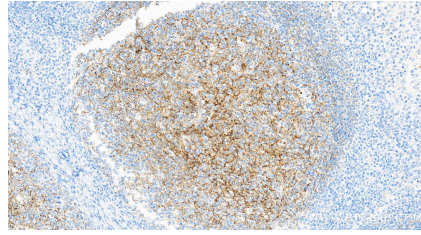
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

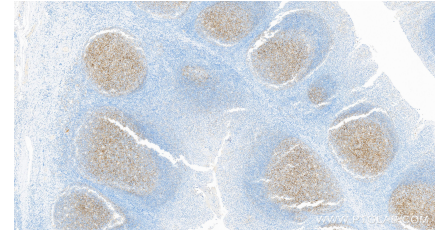
## Selected Validation Data



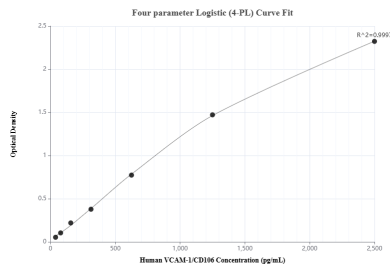
TNF alpha treated HUVEC cells were subjected to SDS PAGE followed by western blot with 84249-4-RR (VCAM-1/CD106 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84249-4-PBS in a different storage buffer formulation.



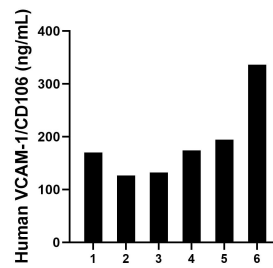
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 84249-4-RR (VCAM-1/CD106 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84249-4-PBS in a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



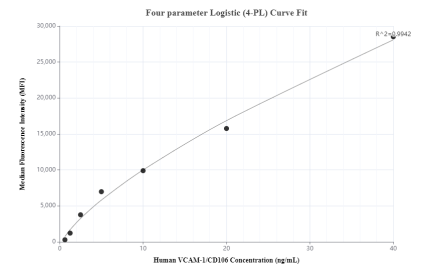
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 84249-4-RR (VCAM-1/CD106 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84249-4-PBS in a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



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