

For Research Use Only

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

Catalog Number: 83719-1-PBS



Basic Information

Catalog Number: 83719-1-PBS	GenBank Accession Number: CAA47989.1	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 22329	CloneNo.: 240597B2
Source: Rabbit	UNIPROT ID: P29533	
Isotype: IgG	Full Name: vascular cell adhesion molecule 1	
	Calculated MW: 81 kDa	
	Observed MW: 90 kDa	

Applications

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

Species Specificity:
mouse

Product Information

83719-1-PBS targets VCAM-1/CD106 as part of a matched antibody pair:

MP00701-1: 83719-1-PBS capture and 83719-4-PBS detection (validated in Cytometric bead array)

MP00701-4: 83719-1-PBS capture and 83719-3-PBS detection (validated in 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

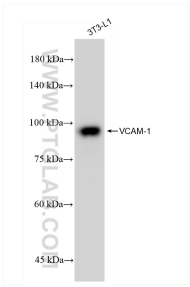
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

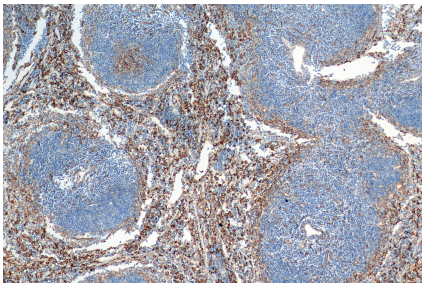
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

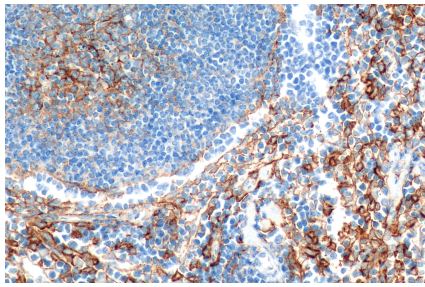
Selected Validation Data



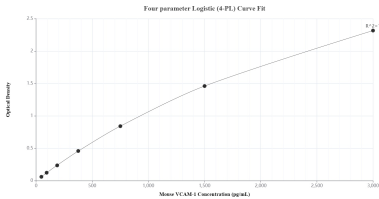
3T3-L1 cells were subjected to SDS PAGE followed by western blot with 83719-1-RR (VCAM-1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83719-1-PBS in a different storage buffer formulation.



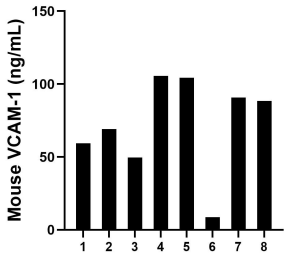
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 83719-1-RR (VCAM-1/CD106 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83719-1-PBS in a different storage buffer formulation.



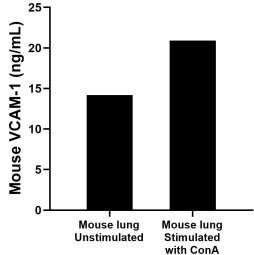
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue slide using 83719-1-RR (VCAM-1/CD106 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83719-1-PBS in a different storage buffer formulation.



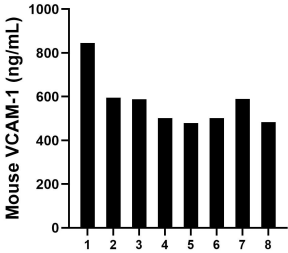
Sandwich ELISA standard curve of MP00701-4, Mouse VCAM-1/CD106 Recombinant Matched Antibody Pair - PBS only. 83719-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0639. 83719-3-PBS was HRP conjugated as the detection antibody. Range: 46.88-3000 pg/mL.



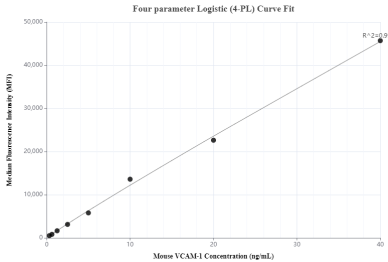
Urine of eight mice was measured. The VCAM-1 concentration of detected samples was determined to be 71.97 ng/mL with a range of 8.65-105.58 ng/mL



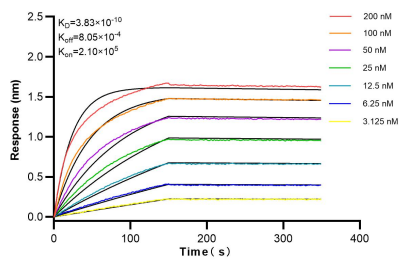
Mouse lung, cut into 1-2 mm pieces, was cultured for 3 days in 25-30 mL of RPMI supplemented with 10% fetal bovine serum and unstimulated or stimulated with 10 µg/mL ConA. The mean VCAM-1 concentration was determined to be 14.2 ng/mL in unstimulated mouse lung superantant, 20.9 ng/mL in ConA stimulated mouse lung superantant.



Serum of eight mice was measured. The VCAM-1 concentration of detected samples was determined to be 572.76 ng/mL with a range of 483.18-844.96 ng/mL.



Cytometric bead array standard curve of MP00701-1, MOUSE VCAM-1/CD106 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83719-1-PBS. Detection antibody: 83719-4-PBS. Standard: Eg0639. Range: 0.313-40 ng/mL.



Bilayer interferometry (BLI) kinetic assays of 83719-1-RR against Mouse VCAM-1 were performed. The affinity constant is 0.383 nM.