For Research Use Only

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

Catalog Number:83719-1-PBS



**Basic Information** 

Catalog Number:

GenBank Accession Number:

Purification Method: Protein A purification

83719-1-PBS

CAA47989.1 GeneID (NCBI):

CloneNo.:

Size: 1 mg/ml

22329 UNIPROT ID: 240597B2

Source: UNIPROT IE
Rabbit P29533
Isotype: Full Name:

gG vascular cell adhesion molecule 1

Calculated MW: 81 kDa Observed MW: 90 kDa

**Applications** 

**Tested Applications:** 

WB, Cytometric bead array, Sandwich ELISA, Indirect

ELISA, Sample test Species Specificity:

mouse

**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

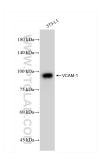
Storage:

Store at -80°C.

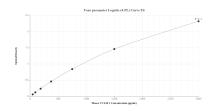
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C  $\,$ 

Storage Buffer: PBS Only

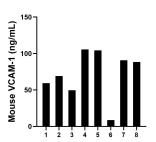
## Selected Validation Data



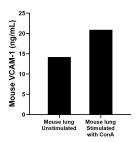
3T3-L1 cells were subjected to SDS PAGE followed by western blot with 83719-1-RR (VCAM-1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83719-1-PBS in a different storage buffer formulation.



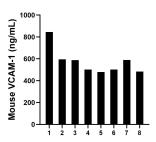
Sandwich ELISA standard curve of MP00701-4, Mouse VCAM-1/CD106 Recombinant Matched Antibody Pair - PBS only. 83719-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0639. 83719-3-PBS was HRP conjugated as the detection antibody. Range: 46.88-3000 pg/mL



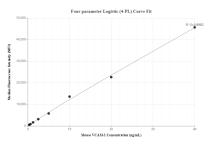
Urine of eight mice was measured. The VCAM-1 concentration of detected samples was determined to be 71.97 ng/mL with a range of 8.65-105.58 ng/mL



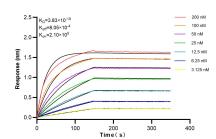
Mouse lung, cut into 1-2 mm pieces, was cultured for 3 days in 25-30 mL of RPMI supplemented with 10% fetal bovine serum and unstimulated or stimulated with 10  $\mu$  g/mL ConA. The mean VCAM-1 concentration was determined to be 14-2 ng/mL in unstimulated mouse lung superantant, 20.9 ng/mL in ConA stimulated 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



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