

## Recombinant Mouse VCAM1 Protein (His Tag)(Active)

Catalog No. PKSM040831

### Description

<b>Synonyms</b>	CD106;Vascular cell adhesion protein 1; Vcam1; L1CAM;VCMA1;Vcam-1
<b>Species</b>	Mouse
<b>Expression_host</b>	HEK293 Cells
<b>Sequence</b>	Met1-Glu698
<b>Accession</b>	NP_035823.3
<b>Mol_Mass</b>	75.8 kDa
<b>AP_Mol_Mass</b>	90-100 kDa
<b>Tag</b>	C-His
<b>Bio_activity</b>	Measured by the ability of the immobilized protein to support adhesion of U937 human histiocytic lymphoma cells. When 5 x 10E4 cells/well are added to mouse VCAM1 coated plates (10 µg/ml with 100 µl/well), approximately 70%-80% cells will adhere after 1 h

### Properties

<b>Purity</b>	> 97 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Background

Vascular cell adhesion molecule 1 (VCAM-1), also known as CD106, is a cell surface sialoglycoprotein belonging to the immunoglobulin superfamily. Two forms of VCAM-1 with either six or seven extracellular Ig-like domains are generated by alternative splicing, with the longer form predominant. VCAM-1 is an endothelial ligand for very late antigen-4 (VLA-4) and  $\alpha 4\beta 7$  integrin expressed on leukocytes, and thus mediates leukocyte-endothelial cell adhesion and signal transduction. VCAM-1 expression is induced on endothelial cells during inflammatory bowel disease, atherosclerosis, allograft rejection, infection, and asthmatic responses. During these responses, VCAM-1 forms a scaffold for leukocyte migration. VCAM-1 also activates signals within endothelial cells resulting in the opening of an "endothelial cell gate" through which leukocytes migrate. VCAM-1 has been identified as a potential anti-inflammatory therapeutic target, the hypothesis being that reduced expression of VCAM-1 will slow the development of atherosclerosis. In addition, VCAM-1-activated signals in endothelial cells are regulated by cytokines indicating that it is important to consider both endothelial cell adhesion molecule expression and function during inflammatory processes.

## SDS-PAGE

