

# Mouse VCAM-1/CD106 Protein

Cat. No. VAM-MM106

## Description

<b>Source</b>	Recombinant Mouse VCAM-1/CD106 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Phe25-Glu698.
<b>Accession</b>	NP_035823.3
<b>Molecular Weight</b>	The protein has a predicted MW of 75.48 kDa. Due to glycosylation, the protein migrates to 80-100 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

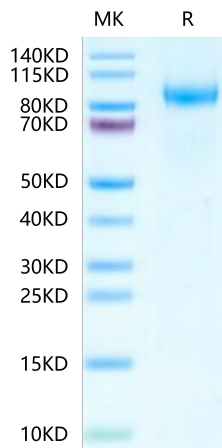
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Tumor necrosis factor alpha (TNF $\alpha$ ) is a pro-inflammatory cytokine that triggers the expression of inflammatory molecules, including other cytokines and cell adhesion molecules. TNF $\alpha$  induces the expression of intercellular cell adhesion molecule-1 and vascular cell adhesion molecule-1 (VCAM-1). VCAM-1 was originally identified as a cell adhesion molecule that helps regulate inflammation-associated vascular adhesion and the transendothelial migration of leukocytes, such as macrophages and T cells.

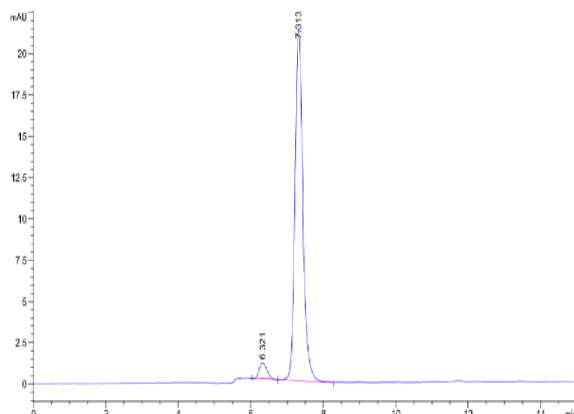
## Assay Data

### Tris-Bis PAGE



Mouse VCAM-1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



The purity of Mouse VCAM-1 is greater than 95% as determined by SEC-HPLC.

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#### Bioactivity Data

Measured by the ability of the immobilized protein to support adhesion of U937 human histiocytic lymphoma cells. When  $5 \times 10^4$  cells/well are added to Mouse VCAM-1 coated plates (10  $\mu\text{g/ml}$  with 100  $\mu\text{l/well}$ ), approximately 70 % - 80 % cells will adhere after 1 hour incubation at room temperature.