Recombinant Protein Technical Manual

Recombinant Human VCAM1 Protein (Fc Tag)(Active)

RPES1914

Product Data:

Product SKU: RPES1914

Size: 100µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_001069.1

Protein Information:

Molecular Mass:	101 kDa
AP Molecular Mass:	13040 kDa
Tag:	C-Fc
Bio-activity:	Measured by the ability of the immobilized protein to support the adhesion of U937 human histiocytic lymphoma cells. When cells are added to VCAM1 coated plates (10 µg/mL, 100 µL/well) approximately > 70% cells will adhere after 1 hour of incubation at 37℃.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage:	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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile 100mM Glycine, 10mM NaCl, 50mM Tris, pH 7.5
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Vascular Cell Adhesion Protein 1; V-CAM 1; VCAM; INCAM00; CD106; VCAM1; L1CAM

Immunogen Information:

Sequence: Met 1-Pro 697

Background:

Vascular cell adhesion molecule 1 (VCAM), also known as CD106, is a cell surface sialoglycoprotein belonging to the immunoglobulin superfamily. Two forms of VCAM with either six or seven extracellular Ig-like domains are generated by alternative splicing, with the longer form predominant. VCAM is an endothelial ligand for very late antigen-4 (VLA-4) and α4ß7 integrin expressed on leukocytes, and thus mediates leukocyte-endothelial cell adhesion and signal transduction. VCAM expression is induced on endothelial cells during inflammatory bowel disease, atherosclerosis, allograft rejection, infection, and asthmatic responses. During these responses, VCAM forms a scaffold for leukocyte migration. VCAM also activates signals within endothelial cells resulting in the opening of an "endothelial cell gate" through which leukocytes migrate. VCAM has been identified as a potential anti-inflammatory therapeutic target, the hypothesis being that reduced expression of VCAM will slow the development of atherosclerosis. In addition, VCAM-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.