

Recombinant Human VCAM1 Protein (His Tag)

Catalog No. PKSH033448

Description

Synonyms	Vascular Cell Adhesion Protein 1; V-CAM 1; VCAM-1; INCAM-100; CD106; VCAM1; L1CAM
Species	Human
Expression_host	Human Cells
Sequence	Phe25-Glu698
Accession	NP_001069.1
Mol_Mass	75.3 kDa
AP_Mol_Mass	86 kDa
Tag	C-6His

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 2mM CaCl ₂ , 2mM MgCl ₂ , 5% Threhalose, pH 7.2.
Reconstitution	Please refer to the printed manual for detailed information.

Background

VCAM-1 is a single-pass type I membrane protein, contains 7 Ig-like C2-type domains. It is an endothelial ligand for very late antigen-4 (VLA-4) and $\alpha 477$ 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

