

## 32-7285: Recombinant Human Vascular Cell Adhesion Protein 1/VCAM-1/CD106/L1CAM (C-6His)

**Gene :** VCAM1  
**Gene ID :** 7412  
**Uniprot ID :** P19320

### Description

Source: Human Cells.  
MW :75.26kD.

Recombinant Human Vascular Cell Adhesion Protein 1 is produced by our Mammalian expression system and the target gene encoding Phe25-Glu698 is expressed with a 6His tag at the C-terminus. 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  $\alpha 4 \beta 7$  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.

### Product Info

**Amount :** 10  $\mu$ g / 50  $\mu$ g  
**Content :** Lyophilized from a 0.2  $\mu$ m filtered solution of 20mM PB, 150mM NaCl, 2mM CaCl<sub>2</sub>, 2mM MgCl<sub>2</sub>, 5% Threhalose, pH 7.2.  
**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.  
**Amino Acid :** FKIIETTPESRYLAQIGDSVSLTCTTGCESPFFSWRTQIDSPNLNGKVTNEGTTSTLTMPVSVFGNEHSYLCTATCESRKLEKGIQVEIYSFPKDPEIHLSGPLEAGKPITVKCSVADVYPFDRLEIDLLKGDHLMKSQEFLEADARKSLETKSLEVTFTPVIEDIGKVLVCRAKLHIDEMDSVPTVRQAVKELQVYISPKNTVISVNPSTKLQEGGSVTMTCSSEGLPAPEIFWSKKLDNGNLQHLSGNATLTIAMRMEDSGIYVCEGVNLIGKNRKEVELIVQEKPFTVEISPGPRIAAQIGDSVMLTCSVMGCESPSFSWRTQIDSPLSGKVRSEGTNSTLTSPVSFENEHSYLCTVTCGHHKLEKGIQVELYSFPRDPEIEMSGGLVNGSSVTVSCKVPSVYPLDRLEIELLKGETILENIEFLEDMDKSLNKSLEMTFIPTIEDTGKALVCQAKLHIDDMEFEPKQRQSTQTLVNVAPRDTTVLVSPSSILEEGSSVNMTCLSQGFPAPKILWSRQLPNGELQPLSENATLTLISTKMEDSGVYLCEGINQAGRSRKEVELIIQVTPKDIKLTAFPSSESVKEGDTVIISCTCGNVPETWIILKKAETGDTVLSIDGAYTIRKAQLKDAGVYECESKNKVGSQRLSLTLDVQGRENNKDYFSPEVDHHHHHH

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100  $\mu$ g/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/ $\mu$ g (1 IEU/ $\mu$ g) as determined by LAL test.