

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 μg / 50 μg
Content : Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, 2mM CaCl₂, 2mM MgCl₂, 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 : FKIIETTPESRYLAQIGDSVSLTCTTGCESPFFSWRTQIDSP LNGKVTNEGTTSTLTMNPVSFGNEHSYLCTATC
ESRKLEKGIQVEIYSFPKDPEIHLGSPLEAGKPITVKCSVADVYPFDRLEIDLLKGDHLMKSQEFLEADRKSLETK
SLEVTFTPVIEDIGKVLVCRAKLHIDEMDSVPTVRQAVKELQVYISPKNTVISVNPSTKLQEGGVSMTCSSEGLP
APEIFWSKKLDNGNLQHLSGNATLTIAMRMEDSGIYVCEGVNLIGKNRKEVELIVQEKPFTVEISPGPRIAAQIG
DSVMLTCSVMGCESPSFSWRTQIDSP LSGKVRSEGNTSTLTSPVSFENEHSYLCTVTCGHHKLEKGIQVELYS
FPRDPEIEMSGGLVNGSSVTVSCKVPSVYPLDRLEIELLKGETILENIEFLEDTDMKSLENKSLEMTFIPTIEDTGK
ALVCQAKLHIDDMEFEPKQRQSTQTLVNVAPRDTTLVSPSSILEEGSSVNMTCLSQGFAPKILWSRQLPNG
ELQPLSENATLTLISTKMEDSGVYLCEGINQAGRSRKEVELIIQVTPKDIKLTAFPSSESVKEGDTVIISCTCGNVPE
TWIILKKAETGDTVLSIDGAYTIRKAQLKDAGVYECESKNKVGSQLRSLTLDVQGRENNKDYFSPEVDHHHH
HH

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 $\mu\text{g}/\text{ml}$. Dissolve the lyophilized protein in ddH₂O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Endotoxin : Less than 0.1 ng/ μg (1 IEU/ μg) as determined by LAL test.