

Recombinant Mouse VCAM1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51373

Size: 10ug, 100ug

Protein Name: Vascular cell adhesion protein 1 (V-CAM 1) (VCAM-1) (CD antigen CD106)
[Cleaved into: Soluble Vascular Cell Adhesion Molecule-1]

Synonym: Vcam1, Vcam-1

UniProt ID: P29533

UniProt Link: www.uniprot.org/uniprotkb/P29533/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 739 AA

Molecular Weight: 81 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MPVKMVAVLGASTVLWILFAVSQAFKIEISPEYKTIAQIGDSMALTCSTTGCESPLFSWRTQIDSPLNA
KVRTEGSKSVLTMEPVSFENEHSYLCTATCGSGKLESIHVDIYSFPKDPEIQFSGPLEVGKPVTVKC
LAPDIYPVYRLEIDLFGKDQLMNRQEFSSSEMTKSLETKSLEVTFTPVIEDIGKALVCRAKLHIDQIDST
LKERETVKELQVYISPRNTTISVHPSTRLQEGGAVTMTCSSEGLPAPEIFWGRKLDNEVLQLLSGNAT
LTLIAMRMEDSGVYVCEGVNLIGRDKALEVELVQEKPFIVDISPGSQVAAQVGDSVVLTCAAIGCDSP
SFSWRTQTDSPLNGVVRNEGAKSTLVLSVGFEDHSYLCVAVTCLQRTLEKRTQVEVYSFPEDPVIK
MSGPLVHGRPVTVNCTVPNVYPFDHLEIELLKGETTLMKKYFLEEMGIKSLETKILETTFIPTIEDTGKS
LVCLARLHSGEMESEPKQRQSVQPLYVNVAPKETTIWVSPSPILEEGSPVNLTCSSDGIPAPKILWSR
QLNNGELQPLSENTTLTFMSTKRDDSGIYVCEGINEAGISRKSVELIIQVSPKDIQLTVFPSKSVKEGD
TVIISCTCGNVPETWILKKAKTGDMVLKSVDGSYTIRQAQLQDAGIYECESKTEVGSQRLSLTLDVK
GKEHNKDYFSPPELLALYCASSLVIPAIGMIVYFARKANMKGSYSLVEAQKSKV

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Vascular cell adhesion protein 1 (V-CAM 1) (VCAM-1) (CD antigen CD106) [Cleaved into: Soluble Vascular Cell Adhesion Molecule-1] produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Cell adhesion glycoprotein predominantly expressed on the surface of endothelial cells that plays an important role in immune surveillance and inflammation. Acts as a major regulator of leukocyte adhesion to the endothelium through interaction with different types of integrins. During inflammatory responses, binds ligands on the surface of activated endothelial cells to initiate the activation of calcium channels and the plasma membrane-associated small GTPase RAC1 leading to leukocyte transendothelial migration. Also serves as a quality-control checkpoint for entry into bone marrow by providing a 'don't-eat-me' stamping in the context of major histocompatibility complex (MHC) class-I presentation.

Subcellular Localization: [Vascular cell adhesion protein 1]: Cell membrane ; Single-pass type I membrane protein .; [Soluble Vascular Cell Adhesion Molecule-1]: Secreted .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.