Mouse CD36 / SCARB3 Protein (His & Fc Tag)

Catalog Number: 50422-M03H



General Information

Gene Name Synonym:

FAT; GPIV; Scarb3

Protein Construction:

A DNA sequence encoding the extracellular domain of mouse CD36 (NP_001153030.1) (Gly 30-Lys 439) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 88 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA. Immobilized human RSPO1 at 20 μ g/ml (100 μ l/well) can bind mouse CD36 Fc chimera with a linear range of 6.4-800 ng/ml.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Predicted N terminal: Gly 30

Molecular Mass:

The recombinant mouse CD36/Fc chimera is a disulfide-linked homodimer. The reduced monomer consists of 658 amino acids and has a calculated molecular mass of 74.5 kDa. As a result of glycosylation, the apparent molecular mass of rmCD36/Fc monomer is approximately 110-120 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20 $^{\circ}\text{C}$ to -80 $^{\circ}\text{C}$.

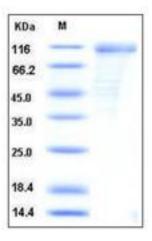
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

The cluster of differentiation (CD) system is commonly used as cell markers in immunophynotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 32 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. Cluster of differentiation 36 (CD36), also known as FAT, SCARB3, GP88, glycoprotein IV (gpIV) and glycoprotein IIIb (gpIIIb), is a member of the CD system as well as the class B scavenger receptor family of cell surface proteins. CD36 can be found on the surface of many cell types in vertebrate animals and it consists of 472 amino acids and is extensively glycosylated. It is an integral membrane protein primarily serving as receptors for thrombospondin and collagen and by the erythrocytes infected with the human malaria parasite. The role of CD36 as a cell surface receptor has been extended to that of a signal transduction molecule.

References

1.Zola H, et al. (2007) CD molecules 2006-human cell differentiation molecules. J Immunol Methods. 318 (1-2): 1-5.

2.Ho IC, et al. (2009) GATA3 and the T-cell lineage: essential functions before and after T-helper-2-cell differentiation. Nat Rev Immunol. 9 (2): 125-35.

3.Matesanz-Isabel J, et al. (2011) New B-cell CD molecules. Immunology Letters.134 (2): 104-12.