Data Sheet (Cat.No.TMPY-01449)

TargetMol

CD36 Protein, Mouse, Recombinant (His & hFc)

General Information

Synonyms:	FAT;CD36 molecule (thrombospondin receptor);Scarb3;GPIV
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. Predicted N terminal: Gly 30
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	Q08857
Molecular Weight:	74.5 kDa (predicted); 110-120 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Measured by its binding ability in a functional ELISA. Immobilized human RSPO1 at 20 μg/ml (100 μl/well) can bind mouse CD36 Fc chimera with a linear range of 6.4-800 ng/ml.
Purity:	> 88 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

The cluster of differentiation (CD) system is commonly used as cell markers in Immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules associating with the immune function of the cell. There are more than 320 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.

Reference

Zola H,et al.(2007) CD molecules 2006-human cell differentiation molecules. J Immunol Methods. 318 (1-2): 1-5.
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.
Matesanz-Isabel J,et al.(2011) New B-cell CD molecules. Immunology Letters.134 (2): 104-12.
Greenwalt RH,et al.(1992) Membrane glycoprotein in CD36: a review of its roles in adherence, signal transduction, and transfusion medicine. The journal of the American society of hematology. 80 (5): 1105-15.