

### Synonym

CD36,SCARB3,BDPLT10,CHDS7,FAT,GP3B,GP4,GPIV,PASIV,Platelet Glycoprotein 4,glycoprotein IV,gpIV,glycoprotein IIIb,gpIIIb

### Source

Biotinylated Human CD36 Protein, Fc, Avitag(CD6-H82F4) is expressed from human 293 cells (HEK293). It contains AA Gly 30 - Asn 439 (Accession # P16671-1).

Predicted N-terminus: Gly 30

## **Molecular Characterization**

CD36(Gly 30 - Asn 439) Fc(Pro 100 - Lys 330)
P16671-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag<sup>TM</sup>)

The protein has a calculated MW of 74.8 kDa. The protein migrates as 105-125 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

### **Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

### Endotoxin

Less than 1.0 EU per µg by the LAL method.

### **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in 50~mM Tris, 100~mM Glycine, 25~mM Arginine, 150~mM Nacl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### **Storage**

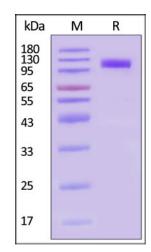
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# SDS-PAGE



Biotinylated Human CD36 Protein, Fc, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

### **Bioactivity-ELISA**

CD36 ELISA

# Biotinylated Human CD36 / SR-B3 Protein, Fc,Avitag™

Catalog # CD6-H82F4



Immobilized Mouse/IgG1,CD36 Antibody at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human CD36 Protein, Fc,Avitag (Cat. No. CD6-H82F4) with a linear range of 1-31 ng/mL (QC tested).

### Background

CD36 (Cluster of Differentiation 36) is also known as platelet membrane glycoprotein IV (GPIV), fatty acid translocase (FAT), thrombospondin receptor, collagen receptor, and scavenger receptor class B, member 3 (SRB3), is a member of the class B scavenger receptor family of cell surface proteins. The human CD36 gene encodes a single chain 472 amino acid residue protein containing both an N- and a C-terminal cytoplasmic tail and an extracellular loop.CD36 is found on platelets, erythrocytes, monocytes, differentiated adipocytes, mammary epithelial cells, spleen cells and some skin microdermal endothelial cells. CD36 is a multiligand pattern recognition receptor that interacts with a large number of structurally dissimilar ligands, including long chain fatty acid (LCFA), advanced glycation end products (AGE), thrombospondin-1, oxidized low-density lipoproteins (oxLDLs), high density lipoprotein (HDL), phosphatidylserine, apoptotic cells, beta-amyloid fibrils (fAβ), collagens I and IV, and Plasmodium falciparum infected erythrocytes. CD36 is required for the anti-angiogenic effects of thrombospondin1 In the corneal neovascularization assay. On binding a ligand the protein and ligand are internalized. This internalization is independent of macropinocytosis and occurs by an actin dependent mechanism requiring the activation Src-family kinases, JNK and Rho-family GTPases. CD36 ligands have also been shown to promote sterile inflammation through assembly of a Toll-like receptor 4 and 6 heterodimer.

### **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.