

Active Recombinant Human CD36 Protein, Fc Tagged

Cat. No. CD36-11248H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human CD36 Protein, Fc Tag is expressed from human 293 cells (HEK293). It contains AA Gly 30-Asn 439 (Accession # P16671-1). This protein carries a human IgG1 Fc tag at the C-terminus. Predicted N-terminus: Gly 30
Species	Human
Source	HEK293
ProteinLength	30-439 aa
Description	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 (Aβ), collagens I and IV, and Plasmodium falciparum infected erythrocytes. CD36 is required for the anti-angiogenic effects of thrombospondin1 In the corneal

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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.

Form

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 with trehalose as protectant.

Bio-activity

Immobilized Human CD36 Protein, Fc Tag at 5 µg/mL (100 µL/well) can bind CD36 Monoclonal Antibody, Mouse/IgG1 with a linear range of 0.2-4 ng/mL.

Molecular Mass

The protein has a calculated MW of 73.1 kDa. The protein migrates as 95-120 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU/µg by the LAL method/rFC method.

Purity

>90% as determined by SDS-PAGE.

Storage

This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution. For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles.

Reconstitution

It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 µg/µL. Centrifuge the vial at 4 centigrade before opening to recover the entire contents.

GENE INFORMATION

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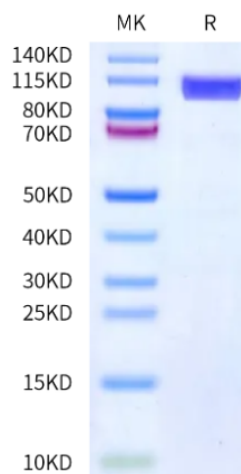
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Gene Name	CD36 CD36 molecule (thrombospondin receptor) [Homo sapiens (human)]
Official Symbol	CD36
Synonyms	CD36; CD36 molecule (thrombospondin receptor); CD36 antigen (collagen type I receptor, thrombospondin receptor); platelet glycoprotein 4; FAT; GP3B; GP4; GPIV; SCARB3; GPIIIB; PAS IV; PAS-4 protein; glycoprotein IIIb; cluster determinant 36; fatty acid translocase; platelet glycoprotein IV; scavenger receptor class B, member 3; leukocyte differentiation antigen CD36; CHDS7; PASIV; BDPLT10;
Gene ID	948
mRNA Refseq	NM_000072
Protein Refseq	NP_000063
MIM	173510
UniProt ID	P16671

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SDS-PAGE

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