

Recombinant Human CD36 protein, His-tagged

Cat. No. CD36-179H **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Recombinant Human CD36 (Gly30-Asn439) protein was fused to His-tag at C-terminus and expressed in human 293 cells (HEK293).

Species

Human

Source

HEK293

ProteinLength

Gly30-Asn439

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 (A β), 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.

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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.

Predicted N Terminal Gly30

Form Lyophilized from 0.22 µm filtered solution in PBS, pH7.4, 10% trehalose.

Molecular Mass The protein has a calculated MW of 47.5 kDa. The protein migrates as 66-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin Less than 1.0 EU per µg by the LAL method.

Purity >95% as determined by SDS-PAGE.

Storage

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

Please avoid repeated freeze-thaw cycles.

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.

Reconstitution It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

GENE INFORMATION

Gene Name CD36

Official Symbol CD36

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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](#)

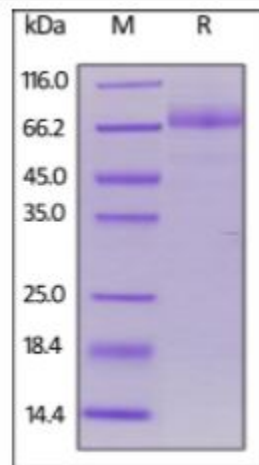
mRNA Refseq [NM_000072](#)

Protein Refseq [NP_000063](#)


MIM [173510](#)

UniProt ID [P16671](#)

SDS-PAGE of CD36-179H



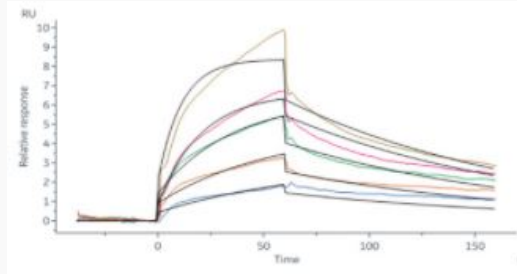
Human CD36, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

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**Bioactivity-SPR of
CD36-179H**



Human CD36, His Tag immobilized on CM5 Chip can bind Human Thrombospondin-2, His Tag with an affinity constant of 21 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

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