

**Synonym**

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

**Source**

Canine CD36, His Tag (CD6-C52H6) is expressed from human 293 cells (HEK293). It contains AA Gly 30 - Asn 439 (Accession # [D5IGC7-1](#)).  
Predicted N-terminus: Gly 30

**Molecular Characterization**

CD36(Gly 30 - Asn 439) D5IGC7-1	Poly-his
------------------------------------	----------

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 48.0 kDa. The protein migrates as 65-80 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per  $\mu\text{g}$  by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22  $\mu\text{m}$  filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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.*

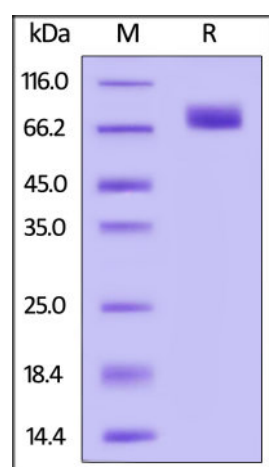
**Storage**

For long term storage, the product should be stored at lyophilized state at  $-20^{\circ}\text{C}$  or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$  for 12 months in lyophilized state;
- $-70^{\circ}\text{C}$  for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**

Canine 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%.

**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 (fA $\beta$ ), 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 [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.