

# CD36 (H-300): sc-9154

## BACKGROUND

CD36 (collagen type I receptor, thrombospondin receptor, FAT, GP4, GP3B, GPIV, PASIV, SCARB3) is a membrane glycoprotein on platelets, monocytes and umbilical vein endothelial cells. CD36 binds to collagen, thrombospondin, anionic phospholipids and oxidized LDL. CD36 plays a key role in both phagocytosis and lipid recycling, for constant production of mature spermatozoa. Mutations in this gene cause platelet glycoprotein deficiency. Three alternatively spliced transcript variants encoding the same protein isoform have been found for this gene. Thrombospondins are widely distributed proteins that influence a variety of adhesive processes and CD36 may have important functions as a cell adhesion molecule.

## REFERENCES

- Greenwalt, D.E., et al. 1992. Membrane glycoprotein CD36: a review of its role in adherence, signal transduction, and transfusion medicine. *Blood* 80: 1105-1115.
- Daniel, J.L., et al. 1994. Collagen induces normal signal transduction in platelets deficient in CD36 (platelet glycoprotein IV). *Thromb. Haemost.* 71: 353-356.

## CHROMOSOMAL LOCATION

Genetic locus: CD36 (human) mapping to 7q21.11; Cd36 (mouse) mapping to 5 A3.

## SOURCE

CD36 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 of CD36 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

CD36 (H-300) is recommended for detection of CD36 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD36 siRNA (h): sc-29995, CD36 siRNA (m): sc-37245, CD36 shRNA Plasmid (h): sc-29995-SH, CD36 shRNA Plasmid (m): sc-37245-SH, CD36 shRNA (h) Lentiviral Particles: sc-29995-V and CD36 shRNA (m) Lentiviral Particles: sc-37245-V.

Molecular Weight of CD36: 88 kDa.

Positive Controls: HUVEC-C whole cell lysate: sc-364180, human platelet extract: sc-363773 or RAW 264.7 whole cell lysate: sc-2211.

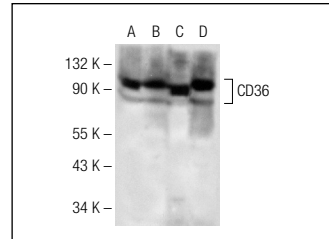
## RESEARCH USE

For research use only, not for use in diagnostic procedures.

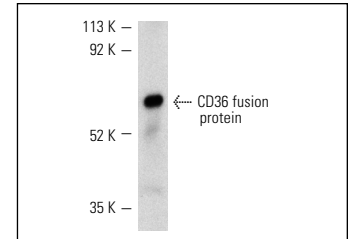
## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA



CD36 (H-300): sc-9154. Western blot analysis of CD36 expression in HUVEC-C (A), human PBL (B), AML-193 (C) and human platelet (D) extract.



CD36 (H-300): sc-9154. Western blot analysis of human recombinant CD36 fusion protein.

## SELECT PRODUCT CITATIONS

- Yabe, U., et al. 2003. Polysialic acid in human milk. CD36 is a new member of mammalian polysialic acid-containing glycoprotein. *J. Biol. Chem.* 278: 13875-13880.
- Weng, S., et al. 2003. β3 integrin deficiency promotes atherosclerosis and pulmonary inflammation in high-fat-fed, hyperlipidemic mice. *Proc. Natl. Acad. Sci. USA* 100: 6730-6735.
- Miquilena-Colina, M.E., et al. 2011. Hepatic fatty acid translocase CD36 upregulation is associated with Insulin resistance, hyperinsulinaemia and increased steatosis in non-alcoholic steatohepatitis and chronic hepatitis C. *Gut* 60: 1394-1402.
- Moussa, M., et al. 2011. CD36 is involved in lycopene and lutein uptake by adipocytes and adipose tissue cultures. *Mol. Nutr. Food Res.* 55: 578-584.
- Tran, T.T., et al. 2011. Luminal lipid regulates CD36 levels and downstream signaling to stimulate chylomicron synthesis. *J. Biol. Chem.* 286: 25201-25210.
- Tepavcevic, S., et al. 2011. Interaction between Insulin and estradiol in regulation of cardiac glucose and free fatty acid transporters. *Horm. Metab. Res.* 43: 524-530.
- McLaren, J.E., et al. 2011. Eicosapentaenoic acid and docosahexaenoic acid regulate modified LDL uptake and macropinocytosis in human macrophages. *Lipids* 46: 1053-1061.
- Koricnac, G., et al. 2012. Estradiol enhances effects of fructose rich diet on cardiac fatty acid transporter CD36 and triglycerides accumulation. *Eur. J. Pharmacol.* 694: 127-134.


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