

CD36 (185-1G2): sc-21772

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.
- Alessio, M., et al. 1996. Synthesis, processing, and intracellular transport of CD36 during monocytic differentiation. *J. Biol. Chem.* 271: 1770-1775.
- Navazo, M.D., et al. 1996. Identification of a domain (155-183) on CD36 implicated in the phagocytosis of apoptotic neutrophils. *J. Biol. Chem.* 271: 15381-15385.
- Dawson, D.W., et al. 1997. CD36 mediates the *in vitro* inhibitory effects of thrombospondin 1 on endothelial cells. *J. Cell Biol.* 138: 707-717.
- Truman, L.A., et al. 2004. Macrophage chemotaxis to apoptotic Burkitt's lymphoma cells *in vitro*: role of CD14 and CD36. *Immunobiology* 209: 21-30.
- Unno, Y., et al. 2004. Advanced glycation end products-modified proteins and oxidized LDL mediate down-regulation of leptin in mouse adipocytes via CD36. *Biochem. Biophys. Res. Commun.* 325: 151-156.

CHROMOSOMAL LOCATION

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

SOURCE

CD36 (185-1G2) is a mouse monoclonal antibody raised against human leucocytes.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD36 (185-1G2) is available conjugated to either phycoerythrin (sc-21772 PE), fluorescein (sc-21772 FITC) or Alexa Fluor[®] 488 (sc-21772 AF488) or Alexa Fluor[®] 647 (sc-21772 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

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APPLICATIONS

CD36 (185-1G2) is recommended for detection of CD36 of mouse, rat and human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

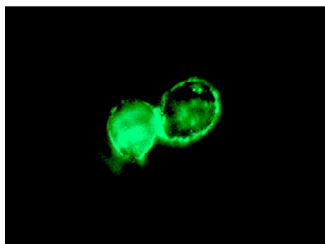
Suitable for use as control antibody for CD36 siRNA (h): sc-29995, CD36 siRNA (m): sc-37245, CD36 shRNA Plasmid (h): sc-29995-SH, CD36 shRNA Plasmid (m): sc-37245-SH, CD36 shRNA (h) Lentiviral Particles: sc-29995-V, CD36 shRNA (m) Lentiviral Particles: sc-37245-V.

Molecular Weight of CD36: 88 kDa.

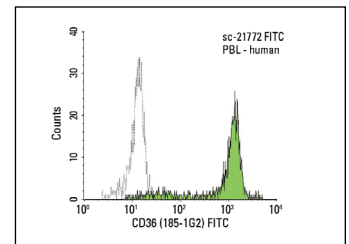
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



CD36 (185-1G2): sc-21772. Immunofluorescence staining of methanol-fixed THP-1 cells showing membrane staining.



CD36 (185-1G2) FITC: sc-21772 FITC. FCM analysis of human peripheral blood leukocytes. Black line histogram represents the isotype control, normal mouse IgG_{2a}-FITC: sc-2856.

SELECT PRODUCT CITATIONS

- Têtu, B., et al. 2008. Immunohistochemical analysis of possible chemoresistance markers identified by micro-arrays on serous ovarian carcinomas. *Mod. Pathol.* 21: 1002-1010.
- Gartner, S., et al. 2012. *De novo* generation of cells within human nurse macrophages and consequences following HIV-1 infection. *PLoS ONE* 7: e40139.
- Hulme, C.H., et al. 2019. The effect of high glucose on lipid metabolism in the human placenta. *Sci. Rep.* 9: 14114.
- Cheng, W.L., et al. 2021. PAK1 silencing attenuated proinflammatory macrophage activation and foam cell formation by increasing PPARγ expression. *Oxid. Med. Cell. Longev.* 2021: 6957900.

STORAGE

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

RESEARCH USE

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