SANTA CRUZ BIOTECHNOLOGY, INC.

CD36 (N-15): sc-5522

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

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.

CHROMOSOMAL LOCATION

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

SOURCE

CD36 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus 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.

Blocking peptide available for competition studies, sc-5522 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CD36 (N-15) 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).

CD36 (N-15) is also recommended for detection of CD36 in additional species, including equine, canine, bovine and porcine.

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: human platelet extract: sc-363773.

STORAGE

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

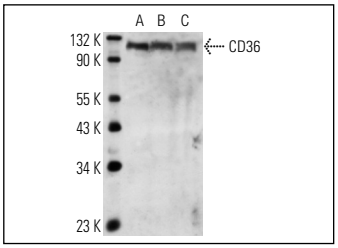
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE

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

DATA



CD36 (N-15): sc-5522. Western blot analysis of CD36 expression in platelet (**A**), hPBL (**B**) and mPBL (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Vallbo, C., et al. 2004. The expression of Thrombospondin 1 in benign prostatic hyperplasia and prostatic intraepithelial neoplasia is decreased in prostate cancer. BJU Int. 93: 1339-1343.
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3. Handberg, A., et al. 2006. Identification of the oxidized low-density lipoprotein scavenger receptor CD36 in plasma: a novel marker of Insulin resistance. Circulation 114: 1169-1176.
4. Damber, J.E., et al. 2006. The anti-tumour effect of low-dose continuous chemotherapy may partly be mediated by Thrombospondin. Cancer Chemother. Pharmacol. 58: 354-360.
5. Fernández-Real, J.M., et al. 2009. Circulating soluble CD36 is a novel marker of liver injury in subjects with altered glucose tolerance. J. Nutr. Biochem. 20: 477-484.
6. Jia, Y., et al. 2010. Panax notoginseng saponins decrease cholesterol ester via up-regulating ATP-binding cassette transporter A1 in foam cells. J. Ethnopharmacol. 132: 297-302.
7. van Groen, T., et al. 2011. Transgenic AD model mice, effects of potential anti-AD treatments on inflammation, and pathology. J. Alzheimers Dis. 24: 301-313.
8. Trujillo, G., et al. 2011. Cofactor regulation of C5a chemotactic activity in physiological fluids. Requirement for the vitamin D binding protein, thrombospondin-1 and its receptors. Mol. Immunol. 49: 495-503.