

CD42b (N-19): sc-7071

BACKGROUND

CD42a is a single-chain membrane glycoprotein that forms a noncovalent complex with CD42b. CD42b, also known as glycoprotein Ib α (GPIb α) is a membrane glycoprotein that is composed of α and β chains. The CD42b β chain is also designated CD42c, and is expressed on platelets and megakaryocytes. CD42a and CD42b are also present on platelets and megakaryocytes, and the complex is a major component of the platelet surface. The complex acts as a receptor for von Willebrand's factor and as a von Willebrand's factor-dependent adhesion receptor.

REFERENCES

- Lopez, J.A., et al. 1988. The α and β chains of human platelet glycoprotein Ib are both transmembrane proteins containing a leucine-rich amino acid sequence. Proc. Natl. Acad. Sci. USA 85: 2135-2139.
- Roth, G.J. 1992. Platelets and blood vessels: the adhesion event. Immunol. Today 13: 100-105.
- Hickey, M.J. and Roth, G.J. 1993. Characterization of the gene encoding human platelet glycoprotein IX. J. Biol. Chem. 268: 3438-3443.
- Kelly, M.D., et al. 1994. Complementary DNA cloning of the alternatively expressed endothelial cell glycoprotein Ib β (GPIb β) and localization of the GPIb β gene to chromosome 22. J. Clin. Invest. 93: 2417-2424.

CHROMOSOMAL LOCATION

Genetic locus: GP1BA (human) mapping to 17p13.2.

SOURCE

CD42b (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CD42b of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-7071 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CD42b (N-19) is recommended for detection of CD42b α chain of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 CD42b siRNA (h): sc-42789, CD42b shRNA Plasmid (h): sc-42789-SH and CD42b shRNA (h) Lentiviral Particles: sc-42789-V.

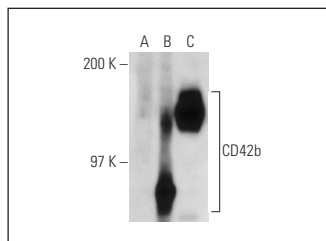
Molecular Weight of CD42b α : 143 kDa.

Positive Controls: CD42b (h): 293T Lysate: sc-114145 or human platelet extract: sc-363773.

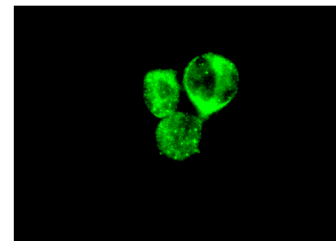
STORAGE

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

DATA



CD42b (N-19): sc-7071. Western blot analysis of CD42b expression in non-transfected: sc-117752 (A) and human CD42b transfected: sc-114145 (B) 293T whole cell lysates and human platelet extract (C).



CD42b (N-19): sc-7071. Immunofluorescence staining of methanol-fixed MEG-01 cells showing membrane localization.

SELECT PRODUCT CITATIONS

- Hagay, Y., et al. 2006. Molecular characterization of a human monoclonal antibody that interacts with a sulfated tyrosine-containing epitope of the GPIb receptor and inhibits platelet functions. Mol. Immunol. 43: 443-453.
- Hadjicacem, B., et al. 2009. Bernard-Soulier syndrome: novel nonsense mutation in GPIIb gene affecting GPIb-IX complex expression. Ann. Hematol. 88: 465-472.
- Hadjicacem, B., et al. 2010. The same genetic defect in three Tunisian families with Bernard Soulier syndrome: a probable founder Stop mutation in GPIIb β . Ann. Hematol. 89: 75-81.
- Chen, Z.M., et al. 2011. Jerdonuxin, a novel snake lectin (snake C-type lectin) with platelet aggregation activity from *Trimeresurus jerdonii* venom. Toxicon 57: 109-116.

RESEARCH USE

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

PROTOCOLS

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

MONOS
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Try **CD42b (E-8): sc-271171** or **CD42b (PM6/40): sc-59051**, our highly recommended monoclonal alternatives to CD42b (N-19).