

# CD42a (N-19): sc-7069

## BACKGROUND

CD42a is a single-chain membrane glycoprotein that forms a noncovalent complex with CD42b. CD42b, also known as glycoprotein Ib  $\alpha$  (GPIb  $\alpha$ ) is a membrane glycoprotein that is composed of  $\alpha$  and  $\beta$  chains. The CD42b  $\beta$  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

1. Lopez, J.A., et al. 1988. The alpha and beta 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.
2. Roth, G.J. 1992. Platelets and blood vessels: the adhesion event. *Immunol. Today* 13: 100-105.
3. Hickey, M.J. and Roth, G.J. 1993. Characterization of the gene encoding human platelet glycoprotein IX. *J. Biol. Chem.* 268: 3438-3443.

## CHROMOSOMAL LOCATION

Genetic locus: GP9 (human) mapping to 3q21.3; Gp9 (mouse) mapping to 6 D1.

## SOURCE

CD42a (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CD42a of human origin.

## PRODUCT

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

CD42a (N-19) is available conjugated fluorescein (sc-7069 FITC, 200  $\mu$ g/ml), for IF, IHC(P) and FCM.

Blocking peptide available for competition studies, sc-7069 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CD42a (N-19) is recommended for detection of CD42a of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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 CD42a siRNA (h): sc-42787, CD42a siRNA (m): sc-42788, CD42a shRNA Plasmid (h): sc-42787-SH, CD42a shRNA Plasmid (m): sc-42788-SH, CD42a shRNA (h) Lentiviral Particles: sc-42787-V and CD42a shRNA (m) Lentiviral Particles: sc-42788-V.

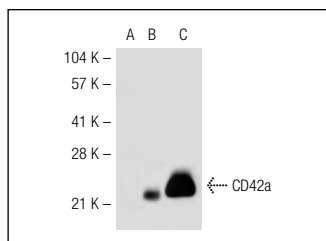
Molecular Weight of CD42a: 24 kDa.

Positive Controls: human peripheral blood leukocyte lysate: sc-363771, human platelet whole cell lysate: sc-363773 or CD42a (h): 293T Lysate: sc-114226.

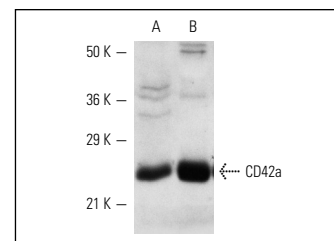
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



CD42a (N-19): sc-7069. Western blot analysis of CD42a expression in non-transfected 293T: sc-117752 (A), human CD42a transfected 293T: sc-114226 (B) whole cell lysates and human platelet extract (C).



CD42a (N-19): sc-7069. Western blot analysis of CD42a expression in human peripheral blood lymphocyte whole cell lysate (A) and human platelet extract (B).

## SELECT PRODUCT CITATIONS

1. Mo, X., et al. 2008. Juxtamembrane basic residues in glycoprotein Ib  $\beta$  cytoplasmic domain are required for assembly and surface expression of glycoprotein Ib-IX complex. *FEBS Lett.* 582: 3270-3274.
2. Kim, K., et al. 2013. Platelet protein disulfide isomerase is required for thrombus formation but not for hemostasis in mice. *Blood* 122: 1052-1061.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **CD42a (A-9): sc-166420** or **CD42a (D-6): sc-390273**, our highly recommended monoclonal alternatives to CD42a (N-19).