

# CD42a (H-53): sc-292519

## 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

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- Kelly, M.D., et al. 1994. Complementary DNA cloning of the alternatively expressed endothelial cell glycoprotein Ib  $\beta$  (GPIb  $\beta$ ) and localization of the GPIb  $\beta$  gene to chromosome 22. J. Clin. Invest. 93: 2417-2424.
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- Kunishima, S., et al. 1994. Bernard-Soulier syndrome Kagoshima: Ser 444 $\rightarrow$ stop mutation of glycoprotein (GP) Ib  $\alpha$  resulting in circulating truncated GPIb  $\alpha$  and surface expression of GPIb  $\beta$  and GPIX. Blood 84: 3356-3362.

## CHROMOSOMAL LOCATION

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

## SOURCE

CD42a (H-53) is a rabbit polyclonal antibody raised against amino acids 85-137 mapping within an internal region 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.

Blocking peptide available for competition studies, sc-292519 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

CD42a (H-53) 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).

CD42a (H-53) is also recommended for detection of CD42a in additional species, including canine.

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.

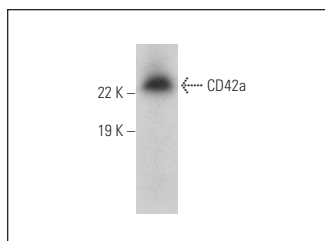
Molecular Weight of CD42a: 24 kDa.

Positive Controls: human platelet lysate: sc-363773.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>TM</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>TM</sup> 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>TM</sup> Mounting Medium: sc-24941.

## DATA



CD42a (H-53): sc-292519. Western blot analysis of CD42a expression in human platelet extract.

## RESEARCH USE

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

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Try **CD42a (A-9): sc-166420** or **CD42a (D-6): sc-390273**, our highly recommended monoclonal alternatives to CD42a (H-53).