

CD42a (A-9): sc-166420

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

1. 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.
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.
4. 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: GP9 (human) mapping to 3q21.3.

SOURCE

CD42a (A-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 22-58 at the N-terminus of CD42a of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD42a (A-9) is available conjugated to agarose (sc-166420 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166420 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166420 PE), fluorescein (sc-166420 FITC), Alexa Fluor[®] 488 (sc-166420 AF488), Alexa Fluor[®] 546 (sc-166420 AF546), Alexa Fluor[®] 594 (sc-166420 AF594) or Alexa Fluor[®] 647 (sc-166420 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-166420 AF680) or Alexa Fluor[®] 790 (sc-166420 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-166420 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

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

APPLICATIONS

CD42a (A-9) is recommended for detection of CD42a of human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 shRNA Plasmid (h): sc-42787-SH and CD42a shRNA (h) Lentiviral Particles: sc-42787-V.

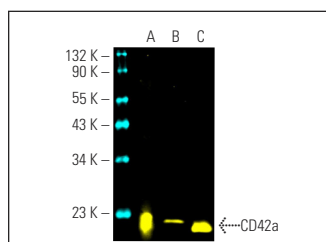
Molecular Weight of CD42a: 24 kDa.

Positive Controls: human platelet extract: sc-363773, human heart extract: sc-363763 or human PBL whole cell lysate.

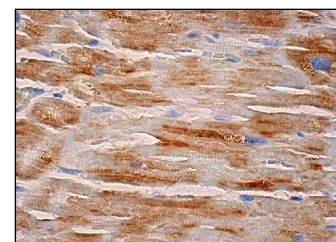
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CD42a (A-9) Alexa Fluor[®] 488: sc-166420 AF488. Direct fluorescent western blot analysis of CD42a expression in human PBL whole cell lysate (A), human heart tissue extract (B) and human platelet extract (C). Blocked with UltraCruz[®] Blocking Reagent: sc-516214. Cruz Marker[™] Molecular Weight Standards detected with Cruz Marker[™] MW Tag-Alexa Fluor[®] 647: sc-516791.



CD42a (A-9): sc-166420. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

SELECT PRODUCT CITATIONS

1. Wang, J.D., et al. 2021. Exosomal HMGB1 promoted cancer malignancy. Cancers 13: 877.

RESEARCH USE

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