

# CD42b (E-8): sc-271171

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

CD42b (E-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 587-620 at the C-terminus of CD42b of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD42b (E-8) is available conjugated to agarose (sc-271171 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271171 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271171 PE), fluorescein (sc-271171 FITC), Alexa Fluor<sup>®</sup> 488 (sc-271171 AF488), Alexa Fluor<sup>®</sup> 546 (sc-271171 AF546), Alexa Fluor<sup>®</sup> 594 (sc-271171 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-271171 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-271171 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-271171 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-271171 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## STORAGE

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

## APPLICATIONS

CD42b (E-8) is recommended for detection of CD42b  $\alpha$  chain of human origin by Western Blotting (starting dilution 1:100, 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 CD42b siRNA (h): sc-42789, CD42b shRNA Plasmid (h): sc-42789-SH and CD42b shRNA (h) Lentiviral Particles: sc-42789-V.

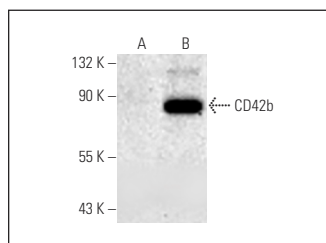
Molecular Weight of CD42b: 143 kDa.

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

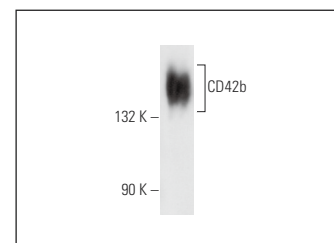
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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 $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



CD42b (E-8): sc-271171. Western blot analysis of CD42b expression in non-transfected: sc-117752 (A) and human CD42b transfected: sc-114145 (B) 293T whole cell lysates.



CD42b (E-8): sc-271171. Western blot analysis of CD42b expression in human platelet extract.

## SELECT PRODUCT CITATIONS

- McCoy, M., et al. 2016. Molecular dynamics of FMRP and other RNA-binding proteins in MEG-01 differentiation: the role of mRNP complexes in non-neuronal development. *Biochem. Cell Biol.* 94: 597-608.
- Reitsma, S.E., et al. 2021. Role of platelets in regulating activated coagulation factor XI activity. *Am. J. Physiol., Cell Physiol.* 320: C365-C374.
- Hu, S., et al. 2021. Platelet membrane and stem cell exosome hybrid enhances cellular uptake and targeting to heart injury. *Nano Today* 39: 101210.
- Arciprete, F., et al. 2023. Inhibition of CXCR1/2 reduces the emperipolesis between neutrophils and megakaryocytes in the Gata1<sup>low</sup> model of myelofibrosis. *Exp. Hematol.* 121: 30-37.

## 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) for detailed protocols and support products.

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