

P-Selectin (CTB201): sc-8419

BACKGROUND

Selectins, also designated CD62 antigens, comprise a family of carbohydrate-binding proteins involved in mediating cellular interactions with leukocytes. L-Selectin (also designated LECAM-1 or CD62L) is expressed on the majority of B and naive T cells and on most monocytes, neutrophils and eosinophils. L-Selectin interacts with specific carbohydrates expressed by activated endothelial cells. P-Selectin (also designated GMP-140 or CD62P), expressed on activated platelets and endothelial cells, and E-Selectin (also designated ELMA-1 or CD62E), expressed on endothelial cells, exhibit overlapping ligand specificities. Both recognize sialyl-Le^x as a ligand and bind to specific carbohydrates on neutrophils and monocytes.

CHROMOSOMAL LOCATION

Genetic locus: SELP (human) mapping to 1q24.2; Selp (mouse) mapping to 1 H2.2.

SOURCE

P-Selectin (CTB201) is a mouse monoclonal antibody raised against P-Selectin of human origin.

PRODUCT

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

P-Selectin (CTB201) is available conjugated to agarose (sc-8419 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to either phycoerythrin (sc-8419 PE), fluorescein (sc-8419 FITC), Alexa Fluor[®] 488 (sc-8419 AF488), Alexa Fluor[®] 546 (sc-8419 AF546), Alexa Fluor[®] 594 (sc-8419 AF594) or Alexa Fluor[®] 647 (sc-8419 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-8419 AF680) or Alexa Fluor[®] 790 (sc-8419 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor[®] is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

P-Selectin (CTB201) is recommended for detection of P-Selectin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for P-Selectin siRNA (h): sc-29421, P-Selectin siRNA (m): sc-36136, P-Selectin shRNA Plasmid (h): sc-29421-SH, P-Selectin shRNA Plasmid (m): sc-36136-SH, P-Selectin shRNA (h) Lentiviral Particles: sc-29421-V and P-Selectin shRNA (m) Lentiviral Particles: sc-36136-V.

Molecular Weight of P-Selectin: 140 kDa.

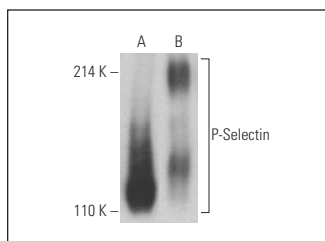
STORAGE

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

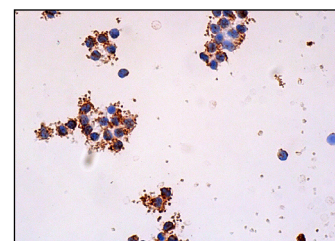
RESEARCH USE

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

DATA



P-Selectin (CTB201): sc-8419. Western blot analysis of P-Selectin expression in human platelet extract (A) and human recombinant P-Selectin (B) under non-reducing conditions. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.



P-Selectin (CTB201): sc-8419. Immunoperoxidase staining of formalin fixed, paraffin-embedded human peripheral blood leukocyte smear showing staining of platelets.

SELECT PRODUCT CITATIONS

- Kim, B.S. and Kim, J.S. 2002. *Vibrio vulnificus* cytotoxin induces hyperadhesiveness of pulmonary endothelial cells for neutrophils through endothelial P-Selectin: a mechanism for pulmonary damage by *Vibrio vulnificus* cytotoxin. *Exp. Mol. Med.* 34: 308-312.
- Sudha, T., et al. 2012. Inhibitory effect of non-anticoagulant heparin (S-NACH) on pancreatic cancer cell adhesion and metastasis in human umbilical cord vessel segment and in mouse model. *Clin. Exp. Metastasis* 29: 431-439.
- Li, Y.L., et al. 2015. Enhanced protective effect of the combination of uncaria and semen raphani on vascular endothelium in spontaneously hypertensive rats. *Evid. Based Complement. Alternat. Med.* 2015: 358352.
- Hayes, V., et al. 2017. Endothelial antigen assembly leads to thrombotic complications in heparin-induced thrombocytopenia. *J. Clin. Invest.* 127: 1090-1098.
- Li, G., et al. 2018. Correlation between the expression of IL-18 and deep venous thrombosis. *Int. J. Mol. Med.* 42: 883-896.
- Trinh, H.K.T., et al. 2019. The synergistic effects of clopidogrel with montelukast may be beneficial for asthma treatment. *J. Cell. Mol. Med.* 23: 3441-3450.
- Benke, K., et al. 2020. Stimulation of soluble guanylate cyclase improves donor organ function in rat heart transplantation. *Sci. Rep.* 10: 5358.
- Nording, H., et al. 2021. The C5a/C5a receptor 1 axis controls tissue neovascularization through CXCL4 release from platelets. *Nat. Commun.* 12: 3352.
- Weng, X., et al. 2022. Targeted delivery and ROS-responsive release of Resolvin D1 by platelet chimeric liposome ameliorates myocardial ischemia-reperfusion injury. *J. Nanobiotechnology* 20: 454.

PROTOCOLS

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