

P-Selectin (1 E 3): sc-19672

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.

SOURCE

P-Selectin (1 E 3) is a mouse monoclonal antibody raised against fixed thrombin-activated human platelets.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

P-Selectin (1 E 3) is available conjugated to agarose (sc-19672 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-19672 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-19672 PE), fluorescein (sc-19672 FITC), Alexa Fluor® 488 (sc-19672 AF488), Alexa Fluor® 546 (sc-19672 AF546), Alexa Fluor® 594 (sc-19672 AF594) or Alexa Fluor® 647 (sc-19672 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-19672 AF680) or Alexa Fluor® 790 (sc-19672 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

P-Selectin (1 E 3) is recommended for detection of P-Selectin of 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 shRNA Plasmid (h): sc-29421-SH and P-Selectin shRNA (h) Lentiviral Particles: sc-29421-V.

Molecular Weight of P-Selectin: 140 kDa.

Positive Controls: human platelet extract: sc-363773.

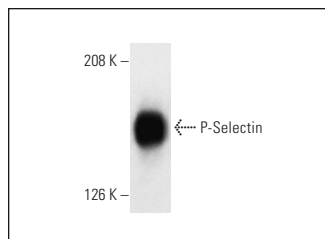
STORAGE

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

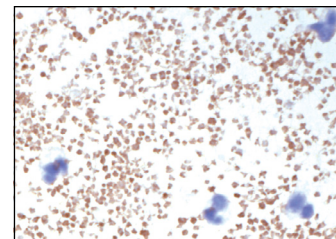
RESEARCH USE

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

DATA



P-Selectin (1 E 3): sc-19672. Western blot analysis of P-Selectin expression in human platelet whole cell lysate.



P-Selectin (1 E 3): sc-19672. Immunoperoxidase staining of formalin-fixed human platelets and white blood cells showing membrane staining of platelets.

SELECT PRODUCT CITATIONS

- Waleh, N., et al. 2005. The role of monocyte-derived cells and inflammation in baboon ductus arteriosus remodeling. *Pediatr. Res.* 57: 254-262.
- Knudsen, T., et al. 2011. Development of a flow cytometric assay for detection of coated platelets in dogs and evaluation of binding of coated platelets to recombinant human coagulation factor VIIa. *Am. J. Vet. Res.* 72: 1007-1014.
- Sobhan, P.K., et al. 2012. Immortalized functional endothelial progenitor cell lines from umbilical cord blood for vascular tissue engineering. *Tissue Eng. Part C Methods* 18: 890-902.
- Schneider-Hohendorf, T., et al. 2014. VLA-4 blockade promotes differential routes into human CNS involving PSGL-1 rolling of T cells and MCAM-adhesion of TH17 cells. *J. Exp. Med.* 211: 1833-1846.
- Larocca, L.M., et al. 2015. Megakaryocytic emperipolesis and platelet function abnormalities in five patients with gray platelet syndrome. *Platelets* 26: 751-757.
- Cheng, B., et al. 2016. Biomimicking platelet-monocyte interactions as a novel targeting strategy for heart healing. *Adv. Healthc. Mater.* 5: 2686-2697.
- Miteva, K.T., et al. 2019. Rab46 integrates Ca²⁺ and histamine signaling to regulate selective cargo release from Weibel-Palade bodies. *J. Cell Biol.* 218: 2232-2246.
- Szilágyi, B., et al. 2020. Reduced miR-26b expression in megakaryocytes and platelets contributes to elevated level of platelet activation status in sepsis. *Int. J. Mol. Sci.* 21: 866.
- Wang, Z., et al. 2023. Aβ1-42-containing platelet-derived extracellular vesicle is associated with cognitive decline in Parkinson's disease. *Front. Aging Neurosci.* 15: 1170663.

PROTOCOLS

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