

# P-Selectin (Psel.KO.2.9): sc-101619

## 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<sup>x</sup> as a ligand and bind to specific carbohydrates on neutrophils and monocytes.

## REFERENCES

1. Varki, A. 1994. Selectin ligands. *Proc. Natl. Acad. Sci. USA* 91: 7390-7397.
2. Tedder, T.F., et al. 1995. The selectins: vascular adhesion molecules. *FASEB J.* 10: 866-873.
3. Lasky, L.A. 1995. Selectin-carbohydrate interactions and the initiation of the inflammatory response. *Annu. Rev. Biochem.* 64: 113-139.
4. Pavalko, F.M., et al. 1995. The cytoplasmic domain of L-Selectin interacts with cytoskeletal proteins via  $\alpha$ -actinin: receptor positioning in microvilli does not require interaction with  $\alpha$ -actinin. *J. Cell Biol.* 129: 1155-1164.
5. McEver, R.P., et al. 1995. Leukocyte trafficking mediated by selectin-carbohydrate interactions. *J. Biol. Chem.* 270: 11025-11028.
6. Rosen, S.D. and Bertozzi, C.R. 1996. Two selectins converge on sulphate. *Leukocyte adhesion. Curr. Biol.* 6: 261-264.
7. Diacovo, T.G., et al. 1996. Platelet-mediated lymphocyte delivery to high endothelial venules. *Science* 273: 252-255.
8. Frenette, P.S., et al. 1996. Susceptibility to infection and altered hematopoiesis in mice deficient in both P- and E-Selectins. *Cell* 84: 563-574.

## CHROMOSOMAL LOCATION

Genetic locus: SELP (human) mapping to 1q24.2.

## SOURCE

P-Selectin (Psel.KO.2.9) is a mouse monoclonal antibody raised against 300.19 cells transfected with P-Selectin of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

P-Selectin (Psel.KO.2.9) is available conjugated to either phycoerythrin (sc-101619 PE) or fluorescein (sc-101619 FITC), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM.

## STORAGE

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

## APPLICATIONS

P-Selectin (Psel.KO.2.9) is recommended for detection of P-Selectin of human and porcine 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)] and flow cytometry (1  $\mu$ g per 1 x 10<sup>6</sup> 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.

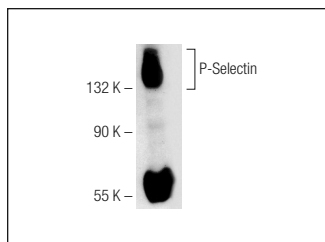
Molecular Weight of P-Selectin: 140 kDa.

Positive Controls: human platelet extract: sc-363773.

## 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™ 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).

## DATA



P-Selectin (Psel.KO.2.9): sc-101619. Western blot analysis of P-Selectin expression in human platelet extract.

## 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.



See **P-Selectin (CTB201): sc-8419** for P-Selectin antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.