

# P-Selectin (HI62P): sc-51687

## 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

- Varki, A. 1994. Selectin ligands. *Proc. Natl. Acad. Sci. USA* 91: 7390-7397.
- Lasky, L.A. 1995. Selectin-carbohydrate interactions and the initiation of the inflammatory response. *Annu. Rev. Biochem.* 64: 113-139.
- Tedder, T.F., Steeber, D.A., Chen, A. and Engel, P. 1995. The selectins: vascular adhesion molecules. *FASEB J.* 10: 866-873.
- Pavalko, R.M., Walker, D.M., Graham, L., Goheen, M., Doerschuk, C.M. and Kansas, G.S. 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.
- Frenette, P., Mayadas, T., Rayburn, H., Hynes, R. and Wagner, D. 1996. Susceptibility to infection and altered hematopoiesis in mice deficient in both P- and E-Selectins. *Cell* 84: 563-574.
- Rosen, S.D. and Bertozzi, C.R. 1996. Two selectins converge on sulphate. *Leukocyte adhesion.* *Curr. Biol.* 6: 261-264.
- McEver, R., Moore, K. and Cummings, R. 1996. Leukocyte trafficking mediated by selectin-carbohydrate interactions. *J. Biol. Chem.* 270: 11025-11028.
- Diacovo, T.G., Puri, K.D., Warnock, R.A., Springer, T.A., and von Andrian, U.H. 1996. Platelet-mediated lymphocyte delivery to high endothelial venules. *Science* 273: 252-255.

## CHROMOSOMAL LOCATION

Genetic locus: SELP (human) mapping to 1q22-q25; Selp (mouse) mapping to 1 H2.2.

## SOURCE

P-Selectin (HI62P) is a mouse monoclonal antibody raised against human platelets.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as phycoerythrin (sc-51687 PE) or fluorescein (sc-51687 FITC) conjugates for flow cytometry, 100 tests.

## APPLICATIONS

P-Selectin (HI62P) is recommended for detection of P-Selectin of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) 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.

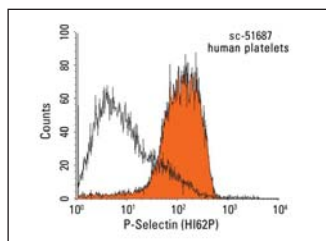
Molecular Weight of P-Selectin: 140 kDa.

Positive Controls: white blood cells or human platelet extract.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

## DATA



P-Selectin (HI62P): sc-51687. Indirect FCM analysis of human platelets stained with P-Selectin (HI62P), followed by PE-conjugated goat anti-mouse IgG: sc-3738. Black line histogram represents the isotype control, normal mouse IgG<sub>1</sub>: sc-3877.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.