

P-Selectin (P8G6): sc-18834

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, α 3/18/2004nd 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.

REFERENCES

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- Tedder, T.F., et al. 1995. The selectins: vascular adhesion molecules. FASEB J. 10: 866-873.
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- Pavalko, R.M., et al. 1995. The cytoplasmic domain of L-Selectin interacts with cytoskeletal proteins via α -actinin: receptor positioning in microvilli does not require interaction with alpha-actenin. J. Cell. Biol. 129: 1155-1164.
- Rosen, S.D. and Bertozzi, C.R. 1996. Two selectins converge on sulphate. Leukocyte adhesion. Curr. Biol. 6: 261-264.
- McEver, R.P., et al. 1996. Leukocyte trafficking mediated by selectin-carbohydrate interactions. J. Biol. Chem. 270: 11025-11028.
- Diacovo, T.G., et al. 1996. Platelet-mediated lymphocyte delivery to high endothelial venules. Science 273: 252-255.
- 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 (P8G6) is a mouse monoclonal antibody raised against IL-1 β activated HUV-EC cells expressing full length P-Selectin.

STORAGE

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

PROTOCOLS

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

PRODUCT

Each vial contains **200 μ g IgG₁** in **1.0 ml** of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as phycoerythrin (sc-18834 PE) or fluorescein (sc-18834 FITC) conjugates for flow cytometry, 100 tests.

Available azide-free for inhibiting P-Selectin dependent interactions and inhibiting platelet binding to monocytes, sc-18834 L, 200 μ g/0.1 ml.

APPLICATIONS

P-Selectin (P8G6) is recommended for detection of P-Selectin of human origin by immunoprecipitation [**1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)**], immunofluorescence and immunohistochemistry (including paraffin-embedded sections) [starting dilution 1:50, dilution range 1:50-**1:500**], flow cytometry [**1 μ g per 1 x 10⁵ cells**] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

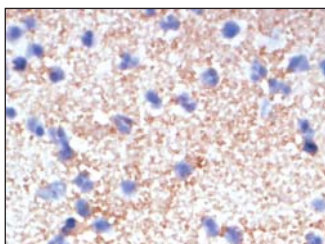
Suitable for use as control antibody for P-Selectin siRNA (h): sc-29421, P-Selectin shRNA Plasmid (h): sc-29421-SH and P-Selectin shRNA (h) Lentiviral Particles: sc-29421-V.

Molecular Weight of P-Selectin: 140 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 2) Immunofluorescence: use goat anti-mouse **gG-FITC**: sc-2010 [dilution range: **1:100-1:400**] or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ **Mounting Medium**: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2050 or ABC: sc-2017 mouse IgG Staining Systems.

DATA



P-Selectin (P8G6): sc-18834. Immunoperoxidase staining of formalin-fixed human platelets and white blood cells showing membrane staining of platelets.

SELECT PRODUCT CITATIONS

- Th  r  t, J.F., et al. 2006. Recombinant P-Selectin glycoprotein-ligand-1 delays thrombin-induced platelet aggregation: a new role for P-Selectin in early aggregation. Br. J. Pharmacol. 148: 299-305.

RESEARCH USE

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