SANTA CRUZ BIOTECHNOLOGY, INC.

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, 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 (P8G6) is a mouse monoclonal antibody raised against IL-1β activated HUV-EC cells expressing full length P-Selectin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for inhibiting P-Selectin dependent interactions and inhibiting platelet binding to monocytes, sc-18834 L, 200 µg/0.1 ml.

P-Selectin (P8G6) is available conjugated to either phycoerythrin (sc-18834 PE) or fluorescein (sc-18834 FITC), 200 µg/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.

RESEARCH USE

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

APPLICATIONS

P-Selectin (P8G6) is recommended for detection of P-Selectin of human origin by 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10^6 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.

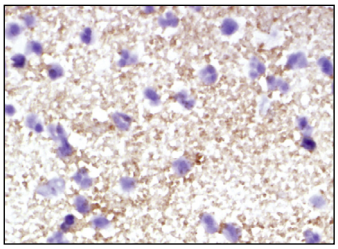
Molecular Weight of P-Selectin: 140 kDa.

Positive Controls: human platelet extract: sc-363773.

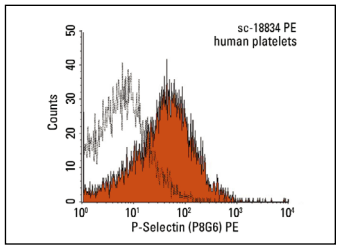
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 3) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



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



P-Selectin (P8G6) PE: sc-18834 PE. FCM analysis of human platelets. Black line histogram represents the isotype control, normal mouse IgG_1-PE: sc-2866.

SELECT PRODUCT CITATIONS

1. Abou-Saleh, H., et al. 2005. Neutrophil P-Selectin-glycoprotein-ligand-1 binding to platelet P-Selectin enhances metalloproteinase 2 secretion and platelet-neutrophil aggregation. Thromb. Haemost. 94: 1230-1235.
2. Theoret, 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.
3. Tong, H., et al. 2014. Inhibition of inflammatory injure by polysaccharides from *Bupleurum chinense* through antagonizing P-Selectin. Carbohydr. Polym. 105: 20-25.
4. Tong, H., et al. 2015. Inhibitory function of P-Selectin-mediated leukocyte adhesion by the polysaccharides from *Sanguisorba officinalis*. Pharm. Biol. 53: 345-349.
5. Tong, H., et al. 2018. Characterization of a P-Selectin-binding moiety from *Bupleurum chinense* polysaccharide and its antagonistic effect against P-Selectin-mediated function. Carbohydr. Polym. 196: 110-116.
6. McHowat, J., et al. 2020. 2-chlorofatty aldehyde elicits endothelial cell activation. Front. Physiol. 11: 460.
7. Wu, S., et al. 2022. Structural characterization and antagonistic effect against P-Selectin-mediated function of SFF-32, a fucoidan fraction from *Sargassum fusiforme*. J. Ethnopharmacol. 295: 115408.

CONJUGATES

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.