SANTA CRUZ BIOTECHNOLOGY, INC.

P-Selectin (H-2): sc-271267

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 endo-thelial 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.

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 α-actinin: receptor positioning in microvilli does not require interaction with α-actinin. J. Cell Biol. 129: 1155-1164.

CHROMOSOMAL LOCATION

Genetic locus: SELP (human) mapping to 1q24.2; Selp (mouse) mapping to 1 H2.2.

SOURCE

P-Selectin (H-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 794-829 at the C-terminus of P-Selectin of human origin.

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.

P-Selectin (H-2) is available conjugated to agarose (sc-271267 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-271267 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271267 PE), fluorescein (sc-271267 FITC), Alexa Fluor® 488 (sc-271267 AF488), Alexa Fluor® 546 (sc-271267 AF546), Alexa Fluor® 594 (sc-271267 AF594) or Alexa Fluor® 647 (sc-271267 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271267 AF680) or Alexa Fluor® 790 (sc-271267 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-271267 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

P-Selectin (H-2) is recommended for detection of P-Selectin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

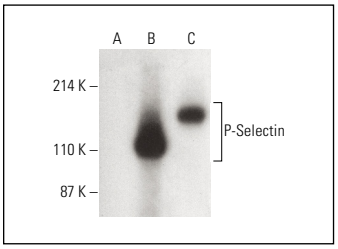
P-Selectin (H-2) is also recommended for detection of P-Selectin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for P-Selectin siRNA (h): sc-29421, P-Selectin siRNA (m): sc-36136, P-Selectin shRNA Plasmid (h): sc-29421-SH, P-Selectin shRNA Plasmid (m): sc-36136-SH, P-Selectin shRNA (h) Lentiviral Particles: sc-29421-V and P-Selectin shRNA (m) Lentiviral Particles: sc-36136-V.

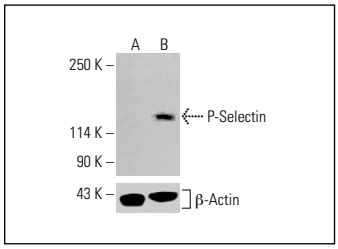
Molecular Weight of P-Selectin: 140 kDa.

Positive Controls: P-Selectin (h): 293T Lysate: sc-114655, WEHI-231 whole cell lysate: sc-2213 or human platelet extract: sc-363773.

DATA



P-Selectin (H-2): sc-271267. Western blot analysis of P-Selectin expression in non-transfected 293T: sc-117752 (**A**) and human P-Selectin transfected 293T: sc-114655 (**B**) whole cell lysates and human platelet extract (**C**). Detection reagent used: m-IgG Fc BP-HRP: sc-525409.



P-Selectin (H-2): sc-271267. Western blot analysis of P-Selectin expression in untreated (**A**) and chemically-treated (**B**) HeLa whole cell lysates. β-Actin (C4): sc-47778 used as loading control. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.

SELECT PRODUCT CITATIONS

1. Ngo, A.T., et al. 2017. Assessment of roles for the Rho-specific guanine nucleotide dissociation inhibitor (RhoGDI) Ly-GDI in platelet function: a spatial systems approach. Am. J. Physiol., Cell Physiol. 312: C527-C536.
2. Malek-Zietek, K.E., et al. 2017. The impact of hyperglycemia on adhesion between endothelial and cancer cells revealed by single-cell force spectroscopy. J. Mol. Recognit. E-published.
3. Inyang, E., et al. 2020. Engineering delivery of nonbiologics using poly(lactic-co-glycolic acid) nanoparticles for repair of disrupted brain endothelium. ACS Omega 5: 14730-14740.
4. Patsouras, M., et al. 2020. The role of thrombospondin-1 in the pathogenesis of antiphospholipid syndrome. J. Autoimmun. 115: 102527.

STORAGE

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