

E-Selectin (UZ5): sc-59765

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. E-Selectin is expressed by cytokine-stimulated endothelial cells and is thought to be responsible for the accumulation of blood leukocytes at sites of inflammation by mediating the adhesion of cells to the vascular lining.

REFERENCES

1. Varki, A. 1994. Selectin ligands. *Proc. Natl. Acad. Sci. USA* 91: 7390-7397.
2. Lasky, L.A. 1995. Selectin-carbohydrate interactions and the initiation of the inflammatory response. *Annu. Rev. Biochem.* 64: 113-139.
3. 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 α -actinin: receptor positioning in microvilli does not require interaction with α -actinin. *J. Cell Biol.* 129: 1155-1164.
4. Tedder, T.F., Steeber, D.A., Chen, A. and Engel, P. 1995. The selectins: vascular adhesion molecules. *FASEB J.* 9: 866-873.
5. Rosen, S.D. and Bertozzi, C.R. 1996. Two selectins converge on sulphate. *Leukocyte adhesion. Curr. Biol.* 6: 261-264.
6. McEver, R.P., Moore, K.L. and Cummings, R.D. 1996. Leukocyte trafficking mediated by selectin-carbohydrate interactions. *J. Biol. Chem.* 270: 11025-11028.
7. 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.
8. Frenette, P.S., Mayadas, T.N., Rayburn, H., Hynes, R.O. and Wagner, D.D. 1996. Susceptibility to infection and altered hematopoiesis in mice deficient in both P- and E-Selectins. *Cell* 84: 563-574.

CHROMOSOMAL LOCATION

Genetic locus: Sele (mouse) mapping to 1 H2.2.

SOURCE

E-Selectin (UZ5) is a rat monoclonal antibody raised against LPS activated m1END1 cells expressing E-Selectin at their cell surface of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

E-Selectin (UZ5) is available conjugated to either phycoerythrin (sc-59765 PE) or fluorescein (sc-59765 FITC), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM.

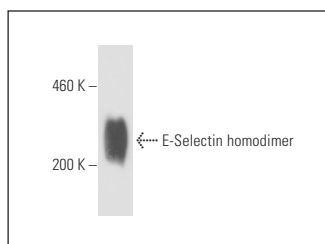
APPLICATIONS

E-Selectin (UZ5) is recommended for detection of E-Selectin of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and flow cytometry (1 μ g per 1×10^6 cells).

Suitable for use as control antibody for E-Selectin siRNA (m): sc-35244, E-Selectin shRNA Plasmid (m): sc-35244-SH and E-Selectin shRNA (m) Lentiviral Particles: sc-35244-V.

Molecular Weight of E-Selectin: 115 kDa.

DATA



E-Selectin (UZ5): sc-59765. Western blot analysis of mouse recombinant E-Selectin under non-reducing conditions.

SELECT PRODUCT CITATIONS

1. Mazzone, G.L., Rigato, I., Ostrow, J.D., Bossi, F., Bortoluzzi, A., Sukowati, C.H., Tedesco, F. and Tiribelli, C. 2009. Bilirubin inhibits the TNF α -related induction of three endothelial adhesion molecules. *Biochem. Biophys. Res. Commun.* 386: 338-344.
2. Xu, J., Lee, S.S., Seo, H., Pang, L., Jun, Y., Zhang, R.Y., Zhang, Z.Y., Kim, P., Lee, W., Kron, S.J. and Yeo, Y. 2018. Quinic acid-conjugated nanoparticles enhance drug delivery to solid tumors via interactions with endothelial selectins. *Small* 14: e1803601.

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 for detailed protocols and support products.