

E-Selectin (M-20): sc-6939

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. 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, R.M., et al. 1995. The cytoplasmic domain of L-selectin interacts with cytoskeletal proteins via alpha-actinin: receptor positioning in microvilli does not require interaction with α -actenin. *J. Cell Biol.* 129: 1155-1164.
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., et al. 1996. Leukocyte trafficking mediated by selectin-carbohydrate interactions. *J. Biol. Chem.* 270: 11025-11028.
7. Diacovo, T.G., et al. 1996. Platelet-mediated lymphocyte delivery to high endothelial venules. *Science* 273: 252-255.
8. 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: Sele (mouse) mapping to 1 H2.2.

SOURCE

E-Selectin (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of E-Selectin of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-6939 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

E-Selectin (M-20) is recommended for detection of E-Selectin of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Xia, G., et al. 2003. Heparin-binding EGF-like growth factor downregulates expression of adhesion molecules and infiltration of inflammatory cells after intestinal ischemia/reperfusion injury. *J. Pediatr. Surg.* 38: 434-439.
2. Everts, M., et al. 2003. Comparison of E-selectin expression at mRNA and protein levels in murine models of inflammation. *Inflamm. Res.* 52: 512-518.
3. Chen, W.X., et al. 2008. Effect of notoginsenoside R1 on hepatic microcirculation disturbance induced by gut ischemia and reperfusion. *World J. Gastroenterol.* 17: 29-37.
4. Eggenhofer, E., et al. 2011. Mesenchymal stem cells together with mycophenolate mofetil inhibit antigen presenting cell and T cell infiltration into allogeneic heart grafts. *Transpl. Immunol.* 24: 157-163.
5. Yamada, Y., et al. 2013. Postinfarct active cardiac-targeted delivery of erythropoietin by liposomes with sialyl Lewis X repairs infarcted myocardium in rabbits. *Am. J. Physiol. Heart Circ. Physiol.* 304: H1124-H1133.

STORAGE

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



Try **E-Selectin (D-7): sc-137054** or **E-Selectin (UZ6): sc-59766**, our highly recommended monoclonal alternatives to E-Selectin (M-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **E-Selectin (D-7): sc-137054**.