

E-Selectin (D-7): sc-137054

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. McEver, R.P., et al. 1995. Leukocyte trafficking mediated by selectin-carbohydrate interactions. *J. Biol. Chem.* 270: 11025-11028.

CHROMOSOMAL LOCATION

Genetic locus: SELE (human) mapping to 1q24.2; Sele (mouse) mapping to 1 H2.2.

SOURCE

E-Selectin (D-7) is a mouse monoclonal antibody raised against amino acids 311-610 mapping at the C-terminus of E-Selectin of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

E-Selectin (D-7) is available conjugated to agarose (sc-137054 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-137054 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-137054 PE), fluorescein (sc-137054 FITC), Alexa Fluor® 488 (sc-137054 AF488), Alexa Fluor® 546 (sc-137054 AF546), Alexa Fluor® 594 (sc-137054 AF594) or Alexa Fluor® 647 (sc-137054 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-137054 AF680) or Alexa Fluor® 790 (sc-137054 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, E-Selectin (D-7) is available conjugated to biotin (sc-137054 B), 200 µg/ml, for WB, IHC(P) and ELISA.

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STORAGE

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

APPLICATIONS

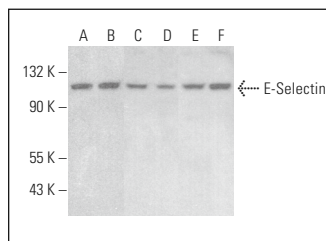
E-Selectin (D-7) is recommended for detection of E-Selectin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 (h): sc-29296, E-Selectin siRNA (m): sc-35244, E-Selectin shRNA Plasmid (h): sc-29296-SH, E-Selectin shRNA Plasmid (m): sc-35244-SH, E-Selectin shRNA (h) Lentiviral Particles: sc-29296-V and E-Selectin shRNA (m) Lentiviral Particles: sc-35244-V.

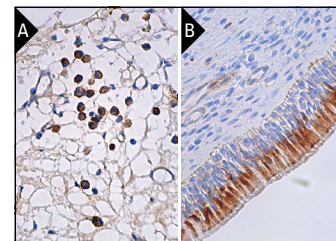
Molecular Weight of E-Selectin: 115 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Ramos cell lysate: sc-2216 or LADMAC whole cell lysate: sc-364189.

DATA



E-Selectin (D-7): sc-137054. Western blot analysis of E-Selectin expression in Jurkat (A), NCI-H460 (B), HL-60 (C), ECV304 (D), LADMAC (E) and Ramos (F) whole cell lysates.



E-Selectin (D-7): sc-137054. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bone marrow tissue showing cytoplasmic staining of hematopoietic cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human nasopharynx tissue showing cytoplasmic staining of respiratory epithelial cells (B).

SELECT PRODUCT CITATIONS

1. Hai-Yan, Z., et al. 2013. *Astragalus* polysaccharide suppresses the expression of adhesion molecules through the regulation of the p38 MAPK signaling pathway in human cardiac microvascular endothelial cells after ischemia-reperfusion injury. *Evid. Based Complement. Alternat. Med.* 2013: 280493.
2. Li, Y., et al. 2019. The role of endothelial MERTK during the inflammatory response in lungs. *PLoS ONE* 14: e0225051.
3. Zhang, X., et al. 2020. KLF4 alleviates cerebral vascular injury by ameliorating vascular endothelial inflammation and regulating tight junction protein expression following ischemic stroke. *J. Neuroinflammation* 17: 107.
4. Calvier, L., et al. 2021. Reelin depletion protects against atherosclerosis by decreasing vascular adhesion of leukocytes. *Arterioscler. Thromb. Vasc. Biol.* 41: 1309-1318.

RESEARCH USE

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