SANTA CRUZ BIOTECHNOLOGY, INC.

E-Selectin (A-10): sc-137203

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 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.

SOURCE

E-Selectin (A-10) 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_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

E-Selectin (A-10) is recommended for detection of E-Selectin of 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).

Suitable for use as control antibody for E-Selectin siRNA (h): sc-29296, E-Selectin shRNA Plasmid (h): sc-29296-SH and E-Selectin shRNA (h) Lentiviral Particles: sc-29296-V.

Molecular Weight of E-Selectin: 115 kDa.

Positive Controls: E-Selectin (h): 293T Lysate: sc-112627, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

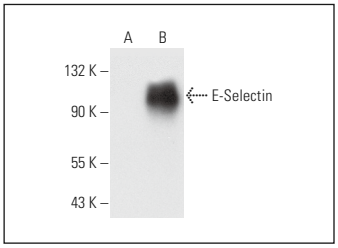
RESEARCH USE

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

STORAGE

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

DATA



E-Selectin (A-10): sc-137203. Western blot analysis of E-Selectin expression in non-transfected: sc-117752 (**A**) and human E-Selectin transfected: sc-112627 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Chen, Y.H., et al. 2008. Angiostatin K1-3 induces E-Selectin via AP1 and Ets1: a mediator for anti-angiogenic action of K1-3. J. Thromb. Haemost. 6: 1953-1961.
2. Yosef, N. and Ubogu, E.E. 2012. αMβ2-Integrin-intercellular adhesion molecule-1 interactions drive the flow-dependent trafficking of Guillain-Barre syndrome patient derived mononuclear leukocytes at the blood-nerve barrier *in vitro*. J. Cell. Physiol. 227: 3857-3875.
3. Hamada, K., et al. 2014. Cell density impacts epigenetic regulation of cytokine-induced E-Selectin gene expression in vascular endothelium. PLoS ONE 9: e90502.
4. Ito, S., et al. 2016. Crucial role of the aryl hydrocarbon receptor (AhR) in indoxyl sulfate-induced vascular inflammation. J. Atheroscler. Thromb. 23: 960-975.
5. Šemeláková, M., et al. 2018. The potential of hypericin and hyperforin for antiadhesion therapy to prevent metastasis of parental and oxaliplatin-resistant human adenocarcinoma cells (HT-29). Anticancer Drugs 29: 983-994.
6. Amirinezhad Fard, E., et al. 2020. Effect of *Tribulus terrestris L.* on expression of ICAM-1, VCAM-1, E-Selectin and proteome profile of human endothelial cells *in-vitro*. Iran. J. Immunol. 17: 64-74.
7. Ahmad, I., et al. 2021. AICAR decreases acute lung injury by phosphorylating AMPK and upregulating heme oxygenase-1. Eur. Respir. J. 58: 2003694.

CONJUGATES

See **E-Selectin (D-7): sc-137054** for E-Selectin antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.