SANTA CRUZ BIOTECHNOLOGY, INC.

E-Selectin (CTB202): sc-5262

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. Lasky, L.A. 1995. Selectin-carbohydrate interactions and the initiation of the inflammatory response. Annu. Rev. Biochem. 64: 113-139.
3. Tedder, T.F., et al. 1995. The selectins: vascular adhesion molecules. FASEB J. 10: 866-873.

CHROMOSOMAL LOCATION

Genetic locus: SELE (human) mapping to 1q24.2.

SOURCE

E-Selectin (CTB202) is a mouse monoclonal antibody raised against full length E-Selectin of human origin.

PRODUCT

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

E-Selectin (CTB202) is available conjugated to either phycoerythrin (sc-5262 PE) or fluorescein (sc-5262 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

E-Selectin (CTB202) is recommended for detection of E-Selectin of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and flow cytometry (1 µg per 1 x 10^6 cells).

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: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or Jurkat + PMA cell lysate: sc-24718.

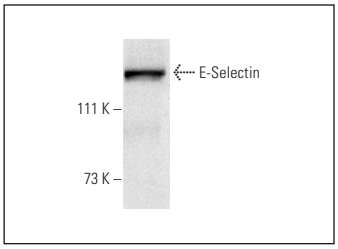
STORAGE

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

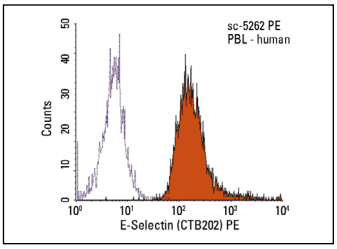
RESEARCH USE

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

DATA



E-Selectin (CTB202): sc-5262. Western blot analysis of E-Selectin expression in HeLa whole cell lysate.



E-Selectin (CTB202) PE: sc-5262 PE. FCM analysis of human peripheral blood leukocytes. Black line histogram represents the isotype control, normal mouse IgG_{2a}-PE: sc-2867.

SELECT PRODUCT CITATIONS

1. Zhang, J.Z., et al. 2003. L-Selectin and E-Selectin expressed on monocytes mediating *Ehrlichia chaffeensis* attachment onto host cells. FEMS Microbiol. Lett. 227: 303-309.
2. Munro, P., et al. 2004. Activation and proteasomal degradation of Rho GTPases by CNF1 elicit a controlled inflammatory response. J. Biol. Chem. 279: 35849-35857.
3. Tan, P.H., et al. 2004. Phenotypic and functional differences between human saphenous vein (HSVEC) and umbilical vein (HUVEC) endothelial cells. Atherosclerosis 173: 171-183.
4. Gong, R., et al. 2006. Hepatocyte growth factor suppresses acute renal inflammation by inhibition of endothelial E-Selectin. Kidney Int. 69: 1166-1174.
5. Grünewald, J.K. and Ridley, A.J. 2010. CD73 represses pro-inflammatory responses in human endothelial cells. J. Inflamm. 7: 10.
6. Meyer, N.J., et al. 2017. Myeloperoxidase-derived 2-chlorofatty acids contribute to human sepsis mortality via acute respiratory distress syndrome. JCI Insight 2: e96432.
7. Kang, Y.M., et al. 2018. Inhibitory effects of *Helianthus tuberosus* ethanol extract on *Dermatophagoides farina* body-induced atopic dermatitis mouse model and human keratinocytes. Nutrients 10: 1657.
8. Soroush, F., et al. 2019. Neutrophil-endothelial interactions of murine cells is not a good predictor of their interactions in human cells. FASEB J. 34: 2691-2702.
9. McHowat, J., et al. 2020. 2-chlorofatty aldehyde elicits endothelial cell activation. Front. Physiol. 11: 460.

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.