SANTA CRUZ BIOTECHNOLOGY, INC.

E-Selectin (2Q780): sc-71017

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.

CHROMOSOMAL LOCATION

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

SOURCE

E-Selectin (2Q780) is a mouse monoclonal antibody raised against IL-1β activated human vascular endothelial cells expressing E-Selectin.

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.

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.

APPLICATIONS

E-Selectin (2Q780) is recommended for detection of E-Selectin of mouse, rat and 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10^6 cells) 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.

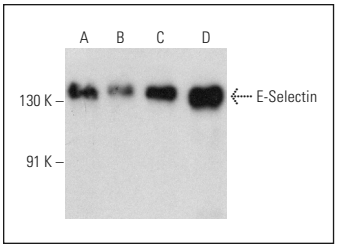
Molecular Weight of E-Selectin: 115 kDa.

Positive Controls: ZR-75-1 cell lysate: sc-2241, NCI-H1299 whole cell lysate: sc-364234 or HT-1080 whole cell lysate: sc-364183.

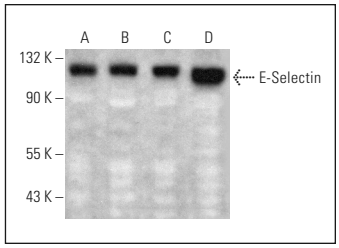
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



E-Selectin (2Q780): sc-71017. Western blot analysis of E-Selectin expression in ZR-75-1 (**A**), NCI-H1299 (**B**), HT-1080 (**C**) and SW480 (**D**) whole cell lysates.



E-Selectin (2Q780): sc-71017. Western blot analysis of E-Selectin expression in ZR-75-1 (**A**), NCI-H1299 (**B**), HT-1080 (**C**) and SW480 (**D**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Dias, W.B., et al. 2008. Endothelial cell signalling induced by *trans*-sialidase from *Trypanosoma cruzi*. Cell. Microbiol. 10: 88-99.
2. Pattillo, C.B., et al. 2009. Radiation-guided targeting of combretastatin encapsulated immunoliposomes to mammary tumors. Pharm. Res. 26: 1093-1100.
3. Alekseeva, A., et al. 2015. Interactions of antitumour Sialyl Lewis X liposomes with vascular endothelial cells. Biochim. Biophys. Acta 1848: 1099-1110.
4. Wang, F., et al. 2017. Regulation of human brain microvascular endothelial cell adhesion and barrier functions by memantine. J. Mol. Neurosci. 62: 123-129.
5. Xu, H., et al. 2019. LKB1/p53/TIGAR/autophagy-dependent VEGF expression contributes to PM2.5-induced pulmonary inflammatory responses. Sci. Rep. 9: 16600.
6. Jian, D., et al. 2020. METTL14 aggravates endothelial inflammation and atherosclerosis by increasing FOXO1 N6-methyladeosine modifications. Theranostics 10: 8939-8956.

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.