

E-Selectin (1.2B6): sc-18852

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. Pavalko, R.M., et al. 1995. The cytoplasmic domain of L-Selectin interacts with cytoskeletal proteins via α -actinin: receptor positioning in microvilli does not require interaction with α -actinin. *J. Cell Biol.* 129: 1155-1164.

CHROMOSOMAL LOCATION

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

SOURCE

E-Selectin (1.2B6) is a mouse monoclonal antibody raised against TNF-activated umbilical vein endothelial cells of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for blocking cell adhesion, sc-18852 L, 200 μ g/0.1 ml.

E-Selectin (1.2B6) is available conjugated to either phycoerythrin (sc-18852 PE) or fluorescein (sc-18852 FITC), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

E-Selectin (1.2B6) is recommended for detection of E-Selectin of human and porcine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μ g per 1×10^6 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.

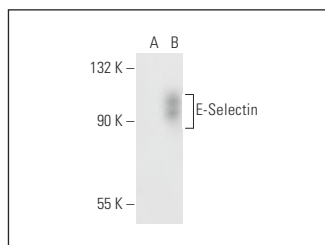
Molecular Weight of E-Selectin: 115 kDa.

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

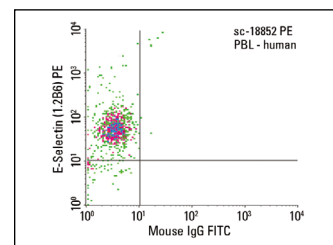
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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 (1.2B6): sc-18852. 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.



E-Selectin (1.2B6) PE: sc-18852 PE. FCM analysis of human peripheral blood leukocytes. Quadrant markers were set based on the isotype control, normal mouse IgG₁-PE: sc-2866.

SELECT PRODUCT CITATIONS

1. Baer, J.T., et al. 2003. Nuclear factor- κ B activation in endothelium by *Chlamydia pneumoniae* without active infection. *J. Infect. Dis.* 188: 1094-1097.
2. Waleh, N., et al. 2005. The role of monocyte-derived cells and inflammation in baboon ductus arteriosus remodeling. *Pediatr. Res.* 57: 254-262.
3. Alessandro, R., et al. 2007. Role of S128R polymorphism of E-Selectin in colon metastasis formation. *Int. J. Cancer* 121: 528-535.
4. Lo Vasco, V.R., et al. 2011. Fetal aorta wall inflammation in ultrasound-detected aortic intima/media thickness and growth retardation. *J. Reprod. Immunol.* 91: 103-107.
5. Wang, Z., et al. 2018. ZBTB7 evokes 5-fluorouracil resistance in colorectal cancer through the NF κ B signaling pathway. *Int. J. Oncol.* 53: 2102-2110.

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.



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.