

L-Selectin (DREG56): sc-18851

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. Both recognize sialyl-Le^x as a ligand and bind to specific carbohydrates on neutrophils and monocytes.

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.* 9: 866-873.
3. Lasky, L.A. 1995. Selectin-carbohydrate interactions and the initiation of the inflammatory response. *Annu. Rev. Biochem.* 64: 113-139.

CHROMOSOMAL LOCATION

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

SOURCE

L-Selectin (DREG56) is a mouse monoclonal antibody raised against phorbol myristic acid activated human peripheral blood leukocytes.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

L-Selectin (DREG56) is available conjugated to either phycoerythrin (sc-18851 PE), fluorescein (sc-18851 FITC) or Alexa Fluor[®] 488 (sc-18851 AF488) or Alexa Fluor[®] 647 (sc-18851 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

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APPLICATIONS

L-Selectin (DREG56) is recommended for detection of L-Selectin of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for L-Selectin siRNA (h): sc-35770, L-Selectin shRNA Plasmid (h): sc-35770-SH and L-Selectin shRNA (h) Lentiviral Particles: sc-35770-V.

Molecular Weight of L-Selectin: 81 kDa.

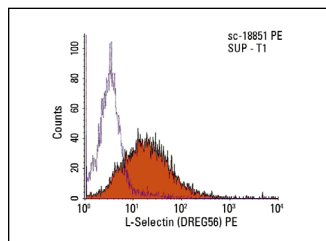
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 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.

STORAGE

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

DATA



L-Selectin (DREG56) PE: sc-18843 PE. FCM analysis of SUP-T1 cells. Black line histogram represents the isotype control, normal mouse IgG₁-PE: sc-2866.

SELECT PRODUCT CITATIONS

1. Chen, C., et al. 2006. c-Abl is involved in the F-Actin assembly triggered by L-Selectin crosslinking. *J. Biochem.* 140: 229-235.
2. Chen, C., et al. 2007. c-Abl is required for the signaling transduction induced by L-Selectin ligation. *Eur. J. Immunol.* 37: 3246-3258.
3. Xu, T., et al. 2008. Critical role of Lck in L-Selectin signaling induced by sulfatides engagement. *J. Leukoc. Biol.* 84: 1192-1201.
4. Burns, S.O., et al. 2010. A congenital activating mutant of WASp causes altered plasma membrane topography and adhesion under flow in lymphocytes. *Blood* 115: 5355-5365.
5. Killock, D.J., et al. 2010. The cytoplasmic domains of TNFα-converting enzyme (TACE/ADAM17) and L-Selectin are regulated differently by p38 MAPK and PKC to promote ectodomain shedding. *Biochem. J.* 428: 293-304.
6. Luo, J., et al. 2010. PI3K is involved in L-Selectin- and PSGL-1-mediated neutrophil rolling on E-Selectin via F-Actin redistribution and assembly. *J. Cell. Biochem.* 110: 910-919.
7. Riese, S.B., et al. 2014. Heterotropic modulation of Selectin affinity by allosteric antibodies affects leukocyte rolling. *J. Immunol.* 192: 1862-1869.
8. Luo, J. 2018. PI3K is a linker between L-Selectin and PSGL-1 signaling to IL-18 transcriptional activation at the promoter level. *Inflammation* 41: 555-561.
9. Rey-Gallardo, A., et al. 2018. Sequential binding of ezrin and moesin to L-Selectin regulates monocyte protrusive behaviour during transendothelial migration. *J. Cell Sci.* 131: jcs215541.
10. Rahman, I., et al. 2021. L-Selectin regulates human neutrophil transendothelial migration. *J. Cell Sci.* 134: jcs250340.

RESEARCH USE

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