

# L-Selectin (FMC46): sc-18918

## 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<sup>x</sup> 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.* 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. Pavalko, R.M., et al. 1995. The cytoplasmic domain of L-Selectin interacts with cytoskeletal proteins via  $\alpha$ -actinin: receptor positioning in microvilli does not require interaction with  $\alpha$ -actinin. *J. Cell Biol.* 129: 1155-1164.
5. Rosen, S.D. and Bertozzi, C.R. 1996. Two selectins converge on sulphate. *Leukocyte adhesion. Curr. Biol.* 6: 261-264.
6. McEver, R.P., et al. 1996. Leukocyte trafficking mediated by Selectin-carbohydrate interactions. *J. Biol. Chem.* 270: 11025-11028.
7. Diacovo, T.G., et al. 1996. Platelet-mediated lymphocyte delivery to high endothelial venules. *Science* 273: 252-255.

## CHROMOSOMAL LOCATION

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

## SOURCE

L-Selectin (FMC46) is a mouse monoclonal antibody raised against PHA stimulated lymphoblasts.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

L-Selectin (FMC46) is available conjugated to either phycoerythrin (sc-18918 PE) or fluorescein (sc-18918 FITC), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM.

## 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

L-Selectin (FMC46) is recommended for detection of L-Selectin of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1  $\mu$ g per 1 x 10<sup>6</sup> cells).

L-Selectin (FMC46) is also recommended for detection of L-Selectin in additional species, including bovine, canine and monkey.

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.

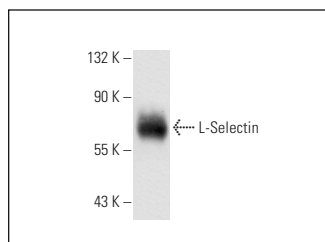
Molecular Weight of L-Selectin: 81 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 .

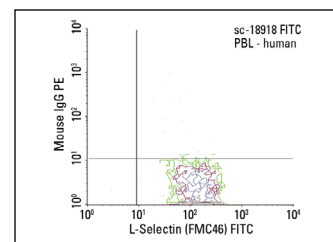
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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 $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  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



L-Selectin (FMC46): sc-18918. Western blot analysis of L-Selectin expression in Jurkat whole cell lysate.



L-Selectin (FMC46) FITC: sc-18918 FITC. FCM analysis of human peripheral blood leukocytes. Quadrant markers were set based on the isotype control, normal mouse IgG<sub>2a</sub> FITC: sc-2857.

## SELECT PRODUCT CITATIONS

1. Bismarck, D., et al. 2012. Canine CD4<sup>+</sup>CD8<sup>+</sup> double positive T cells in peripheral blood have features of activated T cells. *Vet. Immunol. Immunopathol.* 149: 157-166.
2. Hong, L., et al. 2013. Expression pattern of CD34 at the maternal-foetal interface during pregnancy in pigs. *Reprod. Domest. Anim.* 48: 762-767.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.