

PSGL-1 (h): 293T Lysate: sc-114271

BACKGROUND

PSGL-1 (P-selectin glycoprotein ligand, also designated CD162), exists as a disulfide-linked homodimer. PSGL-1 is a type 1 membrane protein that localizes on the tips of microvilli of leukocytes. Its extracellular domain is rich in serines, threonines and prolines, and includes a series of 15 and 16 decameric repeats in HL-60 and U-937 cells, and human leukocytes, respectively. Although PSGL-1 appears to be the sole receptor for P-selectin on human hema-topoietic cells, it also interacts with E-selectin through a unique binding site. In order to bind PSGL-1 to either E-selectin or P-selectin, PSGL-1 must be sialylated and fucosylated. PSGL-1 is a mucin-like molecule, much like leukosialin (CD43), CD164 and CD34. These proteins belong to an emerging family of cell adhesion receptors called sialomucins, which transduce negative signals in hematopoietic cells.

REFERENCES

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- Li, F., Erickson, H., James, J., Moore, K., Cummings, R. and McEver, R. 1996. Visualization of P-selectin glycoprotein ligand-1 as a highly extended molecule and mapping of protein epitopes for monoclonal antibodies. *J. Biol. Chem.* 271: 6342-6348.
- Levesque, J.P., Zannettino, A.C., Pudney, M., Niutta, S., Haylock, D., Snapp, K., Kansas, G., Berndt, M. and Simmons, P. 1999. PSGL-1-mediated adhesion of human hematopoietic progenitors to P-selectin results in suppression of hematopoiesis. *Immunity* 11: 369-378.

CHROMOSOMAL LOCATION

Genetic locus: SELPLG (human) mapping to 12q24.11.

PRODUCT

PSGL-1 (h): 293T Lysate represents a lysate of human PSGL-1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

PSGL-1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive PSGL-1 antibodies. Recommended use: 10-20 µl per lane.

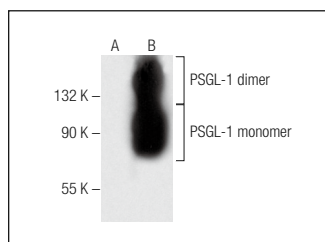
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PSGL-1 (G-9): sc-365506 is recommended as a positive control antibody for Western Blot analysis of enhanced human PSGL-1 expression in PSGL-1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

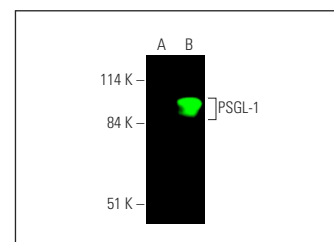
RECOMMENDED SUPPORT REAGENTS

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.

DATA



PSGL-1 (G-9): sc-365506. Western blot analysis of PSGL-1 expression in non-transfected: sc-117752 (A) and human PSGL-1 transfected: sc-114271 (B) 293T whole cell lysates.



PSGL-1 (C-9): sc-398402. Near-infrared western blot analysis of PSGL-1 expression in non-transfected: sc-117752 (A) and human PSGL-1 transfected: sc-114271 (B) 293T whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 680: sc-516180.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.