

# PSGL-1 (3H1915): sc-71940

## 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 deca-meric 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 hematopoietic 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

- Moore, K., et al. 1992. Identification of a specific glycoprotein ligand for P-Selectin (CD62) on myeloid cells. *J. Biol. Chem.* 118: 445-456.
- Sako, D., et al. 1993. Expression cloning of a functional glycoprotein ligand for P-Selectin. *Cell* 75: 1179-1186.

## CHROMOSOMAL LOCATION

Genetic locus: SELPLG (human) mapping to 12q24.11; Selplg (mouse) mapping to 5 F.

## SOURCE

PSGL-1 (3H1915) is a mouse monoclonal antibody raised against PSGL-1 isolated from human neutrophils.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

PSGL-1 (3H1915) is recommended for detection of PSGL-1 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10<sup>6</sup> cells).

Suitable for use as control antibody for PSGL-1 siRNA (h): sc-36323, PSGL-1 siRNA (m): sc-42833, PSGL-1 shRNA Plasmid (h): sc-36323-SH, PSGL-1 shRNA Plasmid (m): sc-42833-SH, PSGL-1 shRNA (h) Lentiviral Particles: sc-36323-V and PSGL-1 shRNA (m) Lentiviral Particles: sc-42833-V.

Molecular Weight of PSGL-1 monomer: 120 kDa.

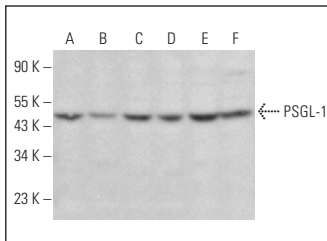
Molecular Weight of PSGL-1 homodimer: 240 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, MOLT-4 cell lysate: sc-2233 or BYDP whole cell lysate: sc-364368.

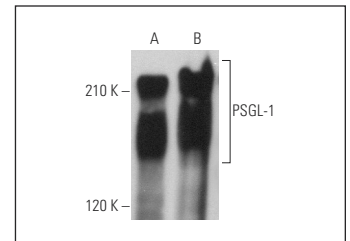
## RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



PSGL-1 (3H1915): sc-71940. Western blot analysis of PSGL-1 expression in CCRF-CEM (A), BYDP (B), WEHI-231 (C), WR19L (D), RAW 264.7 (E) and Daudi (F) whole cell lysates.



PSGL-1 (3H1915): sc-71940. Western blot analysis of PSGL-1 expression in Jurkat (A) and MOLT-4 (B) whole cell lysates.

## 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.

## PROTOCOLS

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



See **PSGL-1 (KPL1): sc-13535** for PSGL-1 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.