

# PSGL-1 (C-19): sc-10172

## 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.

## SOURCE

PSGL-1 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of PSGL-1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-10172 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PSGL-1 (C-19) is recommended for detection of PSGL-1 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

Molecular Weight of PSGL-1 monomer: 120 kDa.

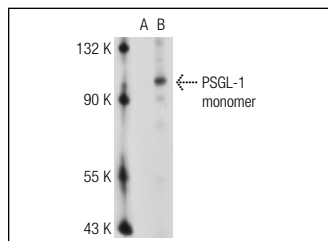
Molecular Weight of PSGL-1 homodimer: 240 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225 or PSGL-1 (h): 293T Lysate: sc-114271.

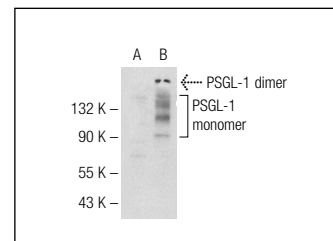
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



PSGL-1 (C-19): sc-10172. 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-19): sc-10172. Western blot analysis of PSGL-1 expression in non-transfected: sc-110760 (A) and human PSGL-1 transfected: sc-159212 (B) 293 whole cell lysates.

## SELECT PRODUCT CITATIONS

- Shimoda, M., et al. 2007. Binding of ADAM28 to P-Selectin glycoprotein ligand-1 enhances P-Selectin-mediated leukocyte adhesion to endothelial cells. *J. Biol. Chem.* 282: 25864-25874.

## 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) or our catalog for detailed protocols and support products.



Try **PSGL-1 (KPL1): sc-13535** or **PSGL-1 (PL2): sc-18856**, our highly recommended monoclonal alternatives to PSGL-1 (C-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **PSGL-1 (KPL1): sc-13535**.