# PSGL-1 (V-15): sc-10174



The Power to Question

# **BACKGROUND**

PSGL-1 (P-Selectin glycoprotein ligand, also designated CD162) exists as a disulfide-linked homodimer consisting of two 120 kDa subunits. 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 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. PSLG-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.P., James, J.A., Moore, K.L., Cummings, R.D. and McEver, R.P. 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.
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# CHROMOSOMAL LOCATION

Genetic locus: Selpl (mouse) mapping to 5 F.

# **SOURCE**

PSGL-1 (V-15) is an affinity purified goat polyclonal antibody raised against a epitope mapping within an internal region of PSGL-1 of mouse origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-10174 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

PSGL-1 (V-15) is recommended for detection of PSGL-1 of mouse and rat 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000)).

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

Molecular Weight of PSGL-1 monomer: 120 kDa.

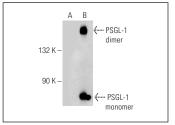
Molecular Weight of PSGL-1 homodimer: 240 kDa.

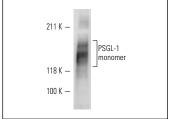
Positive Controls: PSGL-1 (m): 293T Lysate: sc-122816 or rat PBL whole cell lysate.

# **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 (V-15): sc-10174. Western blot analysis of PSGL-1 expression in non-transfected: sc-117752 (A) and mouse PSGL-1 transfected: sc-122816 (B) 293T whole cell lysates.

PSGL-1 (V-15): sc-10174. Western blot analysis of

# **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.