

Product name:	PSGL-1 Rabbit Polyclonal Antibody
Cat number:	ABN16601
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from the N-terminal region of human SELPLG. AA range:1-50
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
Molecular Weight:	45 110kDa(glycosylated)
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a glycoprotein that functions as a high affinity counter-receptor for the cell adhesion molecules P-, E- and L- selectin expressed on myeloid cells and stimulated T lymphocytes. As such, this protein plays a critical role in leukocyte trafficking during inflammation by tethering of leukocytes to activated platelets or endothelia expressing selectins. This protein requires two post-translational modifications, tyrosine sulfation and the addition of the sialyl Lewis x tetrasaccharide (sLe^x) to its O-linked glycans, for its high-affinity binding activity. Aberrant expression of this gene and polymorphisms in this gene are associated with defects in the innate and adaptive immune response. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Apr 2011],function:A SLe(x)-type glycan, which through high affinity, calcium-dependent interactions with E-, P- and L-selectins, mediates rapid rolling of leukocytes over vascular surfaces during the initial steps in inflammation. PSGL1 is critical for the initial leukocyte capture.,online information:P-selectin glycoprotein ligand 1 entry,PTM:Displays complex, core-2, sialylated and fucosylated O-linked oligosaccharides, at least some of which appear to contain poly-N-acetyllactosamine with varying degrees of substitution. Mainly disialylated or neutral forms of the core-2 tetrasaccharide, Galbeta1->4GlcNAc beta1->6(Galbeta1->3)GalNAcOH. The GlcN:GalN ratio is approximately 2:1 and the Man:Fuc ratio 3:5. Contains about 14% fucose with alpha-1,3 linkage present in two forms: One species is a disialylated, monofucosylated glycan, and the other, a monosialylated, trifucosylated glycan with a polylactosamine backbone. The fucosylated forms carry the Lewis antigen and are important for interaction with selectins and for functioning in leukocyte rolling. The modification containing the sialyl Lewis X glycan is on Thr-57. No sulfated O-glycans. Some N-glycosylation.,PTM:Sulfation, in conjunction with the SLe(x)-containing glycan, is necessary for P- and L-selectin binding. High affinity P-selectin binding has a preferred requirement for the isomer sulfated on both Tyr-48 and Tyr-51, whereas L-selectin binding requires predominantly sulfation on Tyr-51 with sulfation on Tyr-48 playing only a minor role. These sulfations play an important role in L- and P-selectin-mediated neutrophil recruitment, and leukocyte rolling.,subunit:Homodimer; disulfide-linked. Interaction with P-, E- and L-selectins, through their lectin/EGF domains, is required for promoting recruitment and rolling of leukocytes. These interactions require sialyl Lewis X glycan modification but there is a differing dependence for tyrosine sulfations. Sulfation on Tyr-51 of PSGL1 is most important for high affinity L-selectin/SELL binding while P-selectin/SELP requires sulfation on Tyr-48. E-selectin/SELE binds with much lower affinity and requires the sLe(x) epitope, but apparently not tyrosine sulfation. Dimerization appears not to be required for P-selectin/SELP binding. Interacts with SNX20.,tissue specificity:Expressed on neutrophils, monocytes and most lymphocytes.,