

Summary

Production Name	PSGL-1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC-P,IF-P,IF-F,ICC/IF,ELISA
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	SELPLG
Alternative Names	SELPLG; P-selectin glycoprotein ligand 1; PSGL-1; Selectin P ligand; CD162
Gene ID	6404.0
SwissProt ID	Q14242.The antiserum was produced against synthesized peptide derived from the N-terminal region of human SELPLG. AA range:1-50

Application

Dilution Ratio	WB 1:500-1:2000, IHC-P 1:100-1:300, ELISA 1:10000, IF-P/IF-F/ICC/IF 1:50-200
Molecular Weight	45 110kDa(glycosylated)

Background

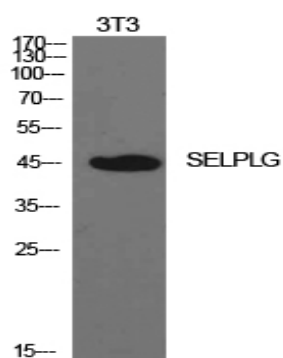
This gene encodes a glycoprotein that functions as a high affinity counter-receptor for the cell adhesion molecules P-, E- and L- selectin expressed on myeloid cells and stimulated T lymphocytes. As such, this protein plays a critical role in leukocyte trafficking during inflammation by tethering of 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 (sLex) 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.,

Research Area

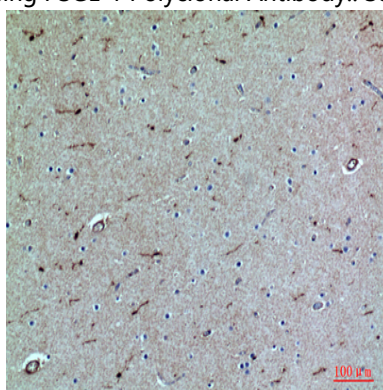
Cell adhesion molecules (CAMs);

Image Data

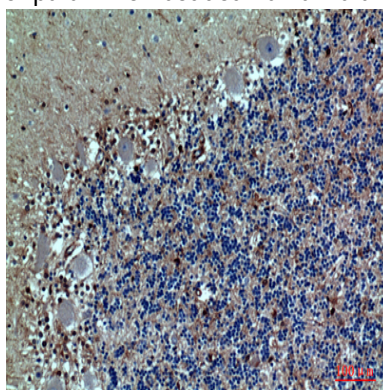
Product Name: PSGL-1 Rabbit Polyclonal Antibody
Catalog #: APRab16601



Western Blot analysis of NIH-3T3 cells using PSGL-1 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:100

Note

For research use only.