SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Primary Antibody]

Rabbit Anti-CD162 antibody

Catalog Number: SL2301R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	CD162
Immunogen:	KLH conjugated synthetic peptide derived from human PSGL-1: 251-350/412 <Extracellular>
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 ICC/IF=1:50-200 Flow-Cyt=1μg /test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human
Predicted MW.:	41kDa
Subcellular Location:	The cell membrane
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-

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	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. **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 apparantly not tyrosine sulfation. Dimerization appears not to be required for P-selectin/SELP binding. Interacts with SNX20. Interacts with MSN and SYK; mediates the activation of SYK by SELPLG. **Subcellular Location:** Membrane; Single-pass type I membrane protein. **Tissue Specificity:** Expressed on neutrophils, monocytes and most lymphocytes. **Post-translational modifications:** 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-->4GlcNAcbeta1-->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. 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. DISEASE: Defects in SELP may be a cause of susceptibility to ischemic stroke (ISCHSTR) [MIM:601367]; also known as cerebrovascular accident or cerebral infarction. A stroke is an acute neurologic event leading to death of neural tissue of the brain and resulting in loss of motor, sensory and/or cognitive function. Ischemic strokes, resulting from vascular occlusion, is considered to be a highly complex disease consisting of a group of

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	heterogeneous disorders with multiple genetic and environmental risk factors. **Similarity:** Belongs to the selectin/LECAM family. Contains 1 C-type lectin domain. Contains 1 EGF-like domain. Contains 8 Sushi (CCP/SCR) domains. **Database links:** **Entrez Gene:** 6404 Human **Entrez Gene:** 363930 Rat Omim: 600738 Human **SwissProt:** Q14242 Human **Unigene:** 591014 Human **Unigene:** 215585 Rat PSGL-1 is widely distributed on the surface of immune cells and can bind to P-, L-, and E-selectin in organisms. It plays an important role in the occurrence and development of inflammation.

[VALIDATION IMAGES]

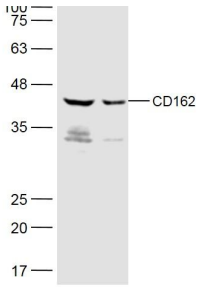


Figure 1. Sample: Raji(Human) Cell Lysate at 30 ug U937(Human) Cell Lysate at 30 ug Primary: Anti-CD162 (SL2301R) at 1/500 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 41 kD Observed band size: 41 kD

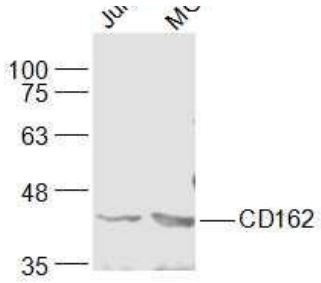


Figure 2. Sample: Jurkat(Human) Cell Lysate at 30 ug MOLT-4(Human) Cell Lysate at 30 ug Primary: Anti-CD162 (SL2301R) at 1/500 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 41 kD Observed band size: 41 kD

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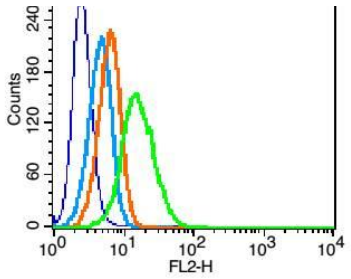


Figure 3. Blank control: U937(blue). Primary Antibody: Rabbit Anti-CD162 antibody(SL2301R), Dilution: 1μg in 100 μL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG (orange),used under the same conditions. Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA. Protocol The cells were fixed with 2% paraformaldehyde (10 min).Primary antibody (SL2301R, 1μg /1x10^6 cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 10% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed

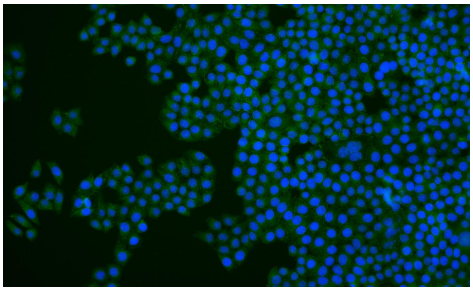


Figure 4. MCF7 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (CD162) polyclonal Antibody, Unconjugated (SL2301R) 1:50, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei

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