Data Sheet (Cat.No.TMPY-03354)

TargetMol

PSGL-1/CD162 Protein, Mouse, Recombinant

General Information

Synonyms:	Psgl1;Selpl;Psgl-1;Selp1;CD162;selectin P ligand
Protein Construction:	A DNA sequence encoding the extracellular domain of mouse SELPLG (Q62170) (Met1-Cys307) was expressed with six amino acids (LEVLFQ) at the C- terminus. Predicted N terminal: Leu 18
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	Q62170
Molecular Weight:	31.2 kDa (predicted); 54.9 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

P-selectin glycoprotein ligand-1 (PSGL-1), also known as SELPLG or CD162, is the high affinity ounter-receptor for P-selectin on expressed on activated endothelial cells and platelets. PSGL-1 is a mucin-type glycoprotein, expressed on leukocytes and platelets as a homodimer of two disulfide-linked subunits of ~12 kD. As cell adhesion molecules, multiple studies have shown that PSGL-1/ P-selectin interaction is required for the normal recruitment

of leukocytes during inflammatory reactions, and also participates in hemostatic responses. PSGL-1 protein requires two distinct posttranslational modifications for the Ca2+-dependent recognition by the lectin domain of P-selectin, that is tyrosine sulfation and specific O-linked glycosylation (sialic acid and fucose). PSGL-1 can also bind to other two members of the selectin family, E-selectin (endothelial) and L-selectin (leukocyte), but binds best to P-selectin.

Reference

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Vandendries, E.R .et al., 2004, Thromb. Haemost. 92: 459-466..5.
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