PRODUCT INFORMATION

Expression system HEK293

Domain 42-295aa

UniProt No. Q14242

NCBI Accession No. AAC50061.1

Alternative Names SELPLG, CLA, CD162, P-selectin glycoprotein ligand 1, PSGL1, Selectin P ligand, PSGL-1, ligand for P-slectin

PRODUCT SPECIFICATION

Molecular Weight 53.4kDa (496aa)

Concentration 1mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS - PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

Tag hlgG-His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

PSGL-1, also known CD162 or SELPLG, is a mucin-type glycoprotein that functions as a high affinity counterreceptor for the cell adhesion molecules P-, Eand L- selectin expressed on myeloid cells and stimulated T lymphocytes. This protein plays a key role in leukocyte adhesion. As such, it plays a critical role in leukocyte trafficking during inflammation by tethering of leukocytes to activated platelets or endothelia expressing



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selectins. PSGL-1 binds chmokines such as CCL19, CCL21, and CCL27, promoting chemotaxis of hematopoietic stem cells and plasma cells to the bone marrow and T cell homing to lymphoid organs. 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. Recombinant human PSGL-1, fused to hlgG-His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

<DGS>QATEYEY LDYDFLPETE PPEMLRNSTD TTPLTGPGTP ESTTVEPAAR RSTGLDAGGA VTELTTELAN MGNLSTDSAA MEIQTTQPAA TEAQTTPLAA TEAQTTRLTA TEAQTTPLAA TEAQTTPPAA TEAQTTQPTG LEAQTTAPAA MEAQTTAPAA MEAQTTPPAA MEAQTTQTTA MEAQTTAPEA TEAQTTQPTA TEAQTTPLAA MEALSTEPSA TEALSMEPTT KRGLFIPFSV SSVTHKGIPM AASNLSV<LEP KSCDKTHTCP PCPAPELLGG PSVFLFPPKP KDTLMISRTP EVTCVVVDVS HEDPEVKFNW YVDGVEVHNA KTKPREEQYN STYRVVSVLT VLHQDWLNGK EYKCKVSNKA LPAPIEKTIS KAKGQPREPQ VYTLPPSRDE LTKNQVSLTC LVKGFYPSDI AVEWESNGQP ENNYKTTPPV LDSDGSFFLY SKLTVDKSRW QQGNVFSCSV MHEALHNHYT QKSLSLSPGK HHHHHH>

General References

Carlisle R., et al, (2013) Pharm Res. 30:352-361. Tinoco R., et al, (2016) Immunity. 44:1190-1203.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain