

PRODUCT INFORMATION



P-Selectin/CD62P (mouse, recombinant)

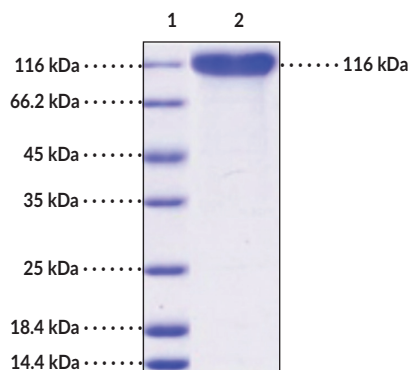
Item No. 35728

Overview and Properties

Synonyms:	CD62 Antigen-like Family Member P, GMP140, Granule Membrane Protein 140, PADGEM, Platelet Activation-dependent Granule-external Membrane Protein, Platelet-selectin, SELP
Source:	Active recombinant C-terminal His-tagged P-selectin expressed in HEK293 cells
Amino Acids:	42-709
Uniprot No.:	Q01102
Molecular Weight:	74 kDa
Storage:	-80°C (as supplied)
Stability:	≥1 year
Purity:	≥95% estimated by SDS-PAGE
Supplied in:	Lyophilized from sterile PBS, pH 7.4
Endotoxin Testing:	<1.0 EU/μg, determined by the LAL endotoxin assay
Bioactivity:	See figure for details
Specific Activity:	Measured by the ability of the immobilized protein to support the adhesion of U937 cells. When 5 × 10 ⁴ cells/well are added to P-selectin-coated plates (5 μg/ml and 100 μl/well), approximately >60% cells will adhere specifically after 60 minutes at 37°C.

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Lane 1: MW Markers
Lane 2: P-Selectin/CD62P

SDS-PAGE Analysis of P-Selectin/CD62P. This protein has a calculated molecular weight of 74 kDa. It has an apparent molecular weight of approximately 116 kDa by SDS-PAGE under reducing conditions due to glycosylation.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

P-selectin, also known as CD62P, is a glycoprotein and cell adhesion molecule that is encoded by *Selp* in mice.¹ It is a homodimer and is composed of an N-terminal calcium-dependent lectin domain that recognizes glycoproteins, an EGF-like domain, nine consensus repeats, a transmembrane domain, and an intracellular C-terminal tail. P-selectin is expressed in platelets, endothelial cells, and macrophages, is stored in α -granules of platelets, and localizes to the plasma membrane upon platelet activation.¹⁻³ It also exists as a soluble form that results from alternative splicing of *SELP*.¹ P-selectin is involved in tethering and rolling of leukocytes during inflammation and tissue healing mediated by binding to P-selectin glycoprotein ligand-1 (PSGL-1), a mucin expressed on the surface of leukocytes.^{1,4} *Selp* knockout delays fatty streak formation and progression to the fibrous plaque stage in LDL receptor-deficient mice fed an atherogenic diet.⁵ It also delays aortic lesion progression in *ApoE*^{-/-} mice.⁶ Cayman's P-Selectin/CD62P (mouse, recombinant) protein can be used for cell-based assays. This protein consists of 679 amino acids, has a calculated molecular weight of 74 kDa, and a predicted N-terminus of Trp42 after signal peptide cleavage. By SDS-PAGE, under reducing conditions, the apparent molecular mass of the protein is 116 kDa due to glycosylation.

References

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