



**LD Biopharma, Inc.**  
9924 Mesa Rim Road, Suite B  
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Tel: 858-876-8266  
<http://www.ldbiopharma.com>

## - PRODUCT DATA SHEET -

**Name of Product:** Recombinant Human CD62p Protein  
**Catalog Number:** hRP-1794  
**Manufacturer:** LD Biopharma, Inc.

### Introduction

Human p-selectin (CD62p) gene encodes a 140 kDa protein that is stored in the alpha-granules of platelets and Weibel-Palade bodies of endothelial cells. This protein redistributes to the plasma membrane during platelet activation and degranulation and mediates the interaction of activated endothelial cells or platelets with leukocytes. The membrane protein is a calcium-dependent receptor that binds to sialylated forms of Lewis blood group carbohydrate antigens on neutrophils and monocytes. Recent data indicated that soluble CD62 level in blood may provides a diagnostic value for many diseases, such as diabetic retinopathy or ulcerative colitis.

Full-length extracellular domain of human CD62p cDNA (42 – 771 aa, derived from BC068533) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal. This protein was expressed in *E. coli* as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

**Gene Symbol:** CD62p (P-selectin; SELP)  
**Accession Number:** NP\_002996  
**Species:** Human  
**Size:** 20 µg / Vial  
**Composition:** 0.2 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, Sucrose and DTT.  
**Storage:** In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

### Key References

Penman A, et al., *P-selectin Plasma Levels and Genetic Variant Associated With Diabetic Retinopathy in African Americans* Am. J. Ophthalmol. 159 (6), 1152-1160 (2015)



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Carrizzo A, et al., *Pentraxin 3 Induces Vascular Endothelial Dysfunction Through a P-selectin/Matrix Metalloproteinase-1 Pathway*  
Circulation 131 (17), 1495-1505 (2015)

Zuchtriegel G, et al., *Spatiotemporal expression dynamics of selectins govern the sequential extravasation of neutrophils and monocytes in the acute inflammatory response.*  
Arterioscler. Thromb. Vasc. Biol. 35 (4), 899-910 (2015)

Mondal N, et al., *ST3Gal-4 is the primary sialyltransferase regulating the synthesis of E-, P-, and L-selectin ligands on human myeloid leukocytes* Blood 125 (4), 687-696 (2015)

Ajdukovic, J., et al., *Soluble P-selectin glycoprotein ligand - a possible new target in ulcerative colitis.* Bratisl Lek Listy 116 (3), 147-149 (2015)

## Applications

1. May be used for in vitro CD62p mediated endothelial activation in inflammation pathway regulation study, with this protein either as soluble factor or as coating matrix protein.
2. May be used for protein-protein interaction mapping.
3. Potential biomarker protein for monitoring soluble CD62 level for various diseases.
4. As immunogen for specific antibody production.

## Quality Control

Purity: > 90% by SDS-PAGE.

## Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHHENLYFQGGEFWTYHYSTKAYSWNISRKYCQNRYTDLVAIQNKNEI  
DYLNKVLPYYSSYWIWIGIRKNNKTWTWVGTKKALTNEAENWADNEPNNKRNNEDCVEIYIKSPS  
APGKWNDEHCLKKHALCYTASCQDMSCSKQGELETIGNYTCSCYPGFYGPCEYVRECGELE  
LPQHVLMMNC SHPLGNFSFNSQCSFHCTDGYQVNGPSKLECLASGIWTKPPQCLAAQCPLKIP  
ERGNMTC LHS AKAFQH QSSCSFSCEE GFALVGP EVVQCTASGVWTAPAPVCKAVQCQHLEAPSE  
GTMDCVHPLTAFAYGSSCKFECQPGYRVRGLDMLRCIDSGHWSAPLPTCEAISCEPLESPVHGS  
MDCSPSLRAFQYDTNCSFRCAEGFMLRGADIVRC DNLGQWTAPAPVCQALQCQDLVPVNEARVN  
CSHPFGAFRYQSVCSFTCNEGLLLVGASVLQCLATGNWNSVPPECQAIPTPLLS PQNGTMTCV  
RPLGSSSYKSTCQFICDEGYSLSGPERLDCTRSGRWTDSPPMCEAIKCELPFAPEQGS LDCSDT



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RGEFNVGSTCHFSCNNGFKLEGPNNVECTTSGRWSATPPTCKGIASLPTPGVQCPALTPGQGT  
MYCRHHPGTFGFNTTCYFGCNAGFTLIGDSTLSCRPSGQWTAVTPACRAVKCSELHVNKPIAMN  
CSNLWGNFSYGSICSFHCLEGQLLNGSAQTACQENHWSTTVPTCQGPLTIQEA