



**LD Biopharma, Inc.**  
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## - PRODUCT DATA SHEET -

**Name of Product:** Recombinant Human CD62L Protein  
**Catalog Number:** hRP-1463  
**Manufacturer:** LD Biopharma, Inc.

### Introduction

Human L-selectin (also named as CD62L) gene encodes a cell surface adhesion molecule that belongs to a family of adhesion/homing receptors. The encoded protein contains a C-type lectin-like domain, a calcium-binding epidermal growth factor-like domain, and two short complement-like repeats. CD62L is required for binding and subsequent rolling of leucocytes on endothelial cells, facilitating their migration into secondary lymphoid organs and inflammation sites. Single-nucleotide polymorphisms in this gene have been associated with various diseases including immunoglobulin A nephropathy. Recent data indicated that in the human CD8<sup>+</sup> population, CD62L<sup>hi</sup> positive cells are true human stem-like T cells.

Full-length of human CD62L extracellular domain cDNA (39-332 aa, derived from BC020758) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal. This protein is 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:** CD62L (SELL; LAM1; LEU8; LNHR; LSEL)  
**Accession Number:** NP\_000646.2  
**Species:** Human  
**Size:** 50 µg / Vial  
**Composition:** 1.0 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, arginine, DTT and Glycerol.  
**Storage:** In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

### Key References

Stemberger C, et al. *Lowest numbers of primary CD8+ T cells can reconstitute protective immunity upon adoptive immunotherapy.* Blood. 124(4):628–637.(2014)



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Luca Gattinoni, et al., *A human memory T cell subset with stem cell-like properties.* Nature Medicine 17, 1290-1297. (2011).

Schwab N, et al., *L-selectin is a possible biomarker for individual PML risk in natalizumab-treated MS patients.* Neurology 81 (10), 865-871 (2013)

Deng W, et al., *Calmodulin adopts an extended conformation when interacting with L-selectin in membranes.* PLoS ONE 8 (5), E62861 (2013)

Elsenberg EH, et al., *Toll-Like Receptor induced CD11b and L-selectin response in patients with coronary artery disease.* PLoS ONE 8 (4), E60467 (2013)

## **Applications**

1. May be used for in vitro CD62L mediated T cell and endothelial cell differentiation regulation study with this protein as either coating matrix protein or soluble factor.
2. May be used for protein-protein interaction assay.
3. Potential biomarker protein for clinical applications such as monitoring lung cancer or MS diseases.
4. As antigen for specific antibody production.

## **Quality Control**

Purity: > 90% by SDS-PAGE.

## **Recombinant Protein Sequence**

MASMTGGQQMGRGHHHHHGNLYFQGEFLCCDFLAHHGTDCWTYHYSEKPMNWQRARRFCRDNY  
TDLVAIQNKAEIEYLEKTLPFSSRSYYWIGIRKIGGIWTWVGTNKSLTEEAENWGDGEPNNKKNK  
EDCVEIYIKRNKDAGKWNDACHKLKAALCYTASCQPWSCSGHGECVEIINNYTCNCDVGYYP  
QCQFVIQCEPLEAPELGTMDCETHPLGNFSFSSQCAFSCSEGTNLTGIEETTTCGPFGNWSSPEPT  
CQVIQCEPLSAPDLGIMNCSHPLASFSFTSACTFICSEGTTELIGKKKTICSSGIWSNPSPICQ  
KLDKSFSMIKEGDYN