

PRODUCT INFORMATION



L-Selectin/CD62L Extracellular Domain (mouse, recombinant)

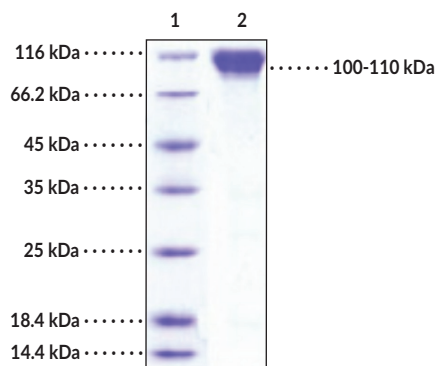
Item No. 35727

Overview and Properties

Synonyms:	CD62 Antigen-like Family Member L, LAM1, LECAM1, Leukocyte-endothelial Cell Adhesion Molecule 1
Source:	Active recombinant C-terminal human IgG1 Fc-His-tagged mouse L-selectin expressed in HEK293 cells
Amino Acids:	39-332
Uniprot No.:	P18337
Molecular Weight:	61 kDa
Storage:	-80°C (as supplied)
Stability:	≥1 year
Purity:	≥90% 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
Protein Concentration:	<i>batch specific</i> mg/ml
Bioactivity:	Measured by the ability of the immobilized protein to support the adhesion of U937 human histiocytic lymphoma cells. When cells are added to SELL coated plates (10 μg/ml, 100 μl/well) approximately >60% cells will adhere specifically.

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

Image



Lane 1: MW Markers

Lane 2: L-Selectin/CD62L Extracellular Domain

SDS-PAGE Analysis of L-Selectin/CD62L Extracellular Domain.

This protein has a calculated molecular weight of 61 kDa. It has an apparent molecular weight of approximately 100-110 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.

Copyright Cayman Chemical Company, 11/08/2021

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

L-Selectin, also known as CD62L, is a glycoprotein and cell adhesion molecule that is encoded by the *SELL* gene in humans.^{1,2} It is composed of an N-terminal calcium-dependent lectin domain that recognizes glycoproteins, an EGF-like domain, two consensus repeats, a transmembrane domain, and an intracellular C-terminal tail. L-selectin is expressed in leukocytes and localizes to the plasma membrane.³ It also exists as a soluble form that results from alternative splicing of *SELL* pre-mRNA or by ectodomain shedding via proteolytic cleavage.² L-selectin facilitates leukocyte rolling on activated vascular endothelium and lymphocyte homing to high endothelial venules of lymph nodes.⁴ It binds to several glycoproteins containing the sulfated sialyl Lewis X (6-sulfo-sLe^X) epitope, including P-selectin glycoprotein ligand-1 (PSGL-1) and glycosylation-dependent cell adhesion molecule-1 (GlyCAM-1).¹ *Sell*^{-/-} mice exhibit a reduction in the lymphocyte count in peripheral lymph nodes, as well as a decrease in neutrophil recruitment in a model of peritonitis induced by thioglycolate.⁴ Serum levels of soluble L-selectin are lower in patients with sepsis and associated with higher mortality.⁶ Cayman's L-Selectin/CD62L Extracellular Domain (mouse, recombinant) protein can be used for cell-based assays. This protein is a disulfide-linked homodimer. The reduced monomer, composed of L-selectin (amino acids 1-332) fused to His-tagged human IgG1 at its C-terminus, consists of 542 amino acids, has a calculated molecular weight of 61 kDa, and a predicted N-terminus of Trp39 after signal peptide cleavage. As a result of glycosylation, the monomer migrates at approximately 100-110 kDa by SDS-PAGE under reducing conditions.

References

1. Tvaroška, I., Selvaraj, C., and Koča, J. Selectins-The two Dr. Jekyll and Mr. Hyde faces of adhesion molecules-A review. *Molecules* **25(12)**, 2835 (2020).
2. Ivetic, A., Green, H.L.H., and Hart, S.J. L-selectin: A major regulator of leukocyte adhesion, migration and signaling. *Front. Immunol.* **10**, 1068 (2019).
3. Stein, J.V., Cheng, G., Stockton, B.M., et al. L-selectin-mediated leukocyte adhesion in vivo: Microvillous distribution determines tethering efficiency, but not rolling velocity. *J. Exp. Med.* **189(1)**, 37-50 (1999).
4. Arbonés, M.L., Ord, D.C., Ley, K., et al. Lymphocyte homing and leukocyte rolling and migration are impaired in L-selectin-deficient mice. *Immunity* **1(4)**, 247-260 (1994).
5. Seidelin, J.B., Nielsen, O.H., and Strøm, J. Soluble L-selectin levels predict survival in sepsis. *Intensive Care Med.* **28(11)**, 1613-1618 (2002).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM