

PRODUCT INFORMATION



E-Selectin/CD62E (mouse, recombinant)

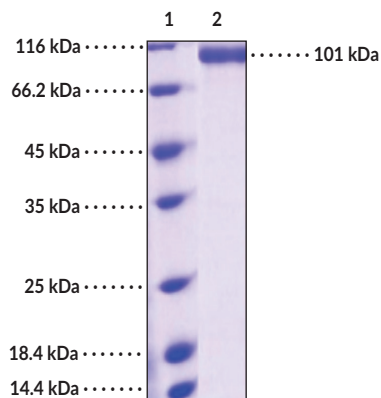
Item No. 35726

Overview and Properties

Synonyms:	CD62 Antigen-like Family Member E, ELAM1, Endothelial Leukocyte Adhesion Molecule 1, LECAM2, Leukocyte-endothelial Cell Adhesion Molecule 2
Source:	Active recombinant C-terminal human IgG1 Fc-tagged mouse E-selectin expressed in HEK293 cells
Amino Acids:	29-564
Uniprot No.:	Q00690
Molecular Weight:	85.5 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
Activity:	Measured by the ability of the immobilized protein to support the adhesion of U937 human histiocytic lymphoma cells. When cells are added to coated plates (10 μg/ml, 100 μl/well), approximately 50% 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: E-Selectin/CD62E

SDS-PAGE Analysis of E-Selectin/CD62E. This protein has a calculated molecular weight of 85.5 kDa. It has an apparent molecular weight of approximately 101 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
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Description

E-Selectin, also known as CD62E, is a glycoprotein encoded by the *SELE* gene in humans that has roles as a cellular adhesion molecule.^{1,2} It is composed of an N-terminal C-type lectin-like domain, which recognizes carbohydrate ligands, an EGF-like domain, multiple short consensus repeats (SCRs), a transmembrane region, and a C-terminal cytoplasmic tail.^{2,3} E-Selectin is constitutively expressed in bone marrow endothelial cells, where it has a role in maintaining the stem cell niche, and its expression is induced in vascular endothelial cells by inflammatory stimuli, such as TNF- α , IL-1 β , or LPS.^{1,2} It also exists as a soluble form that is shed from the cell surface *via* proteolytic cleavage.⁴ E-selectin recognizes and binds to a variety of glycoproteins and glycolipids expressed by leukocytes, hematopoietic cells, or cancer cells, including L-selectin, sialyl Lewis X (sLe^x), and E-selectin ligand-1 (ESL-1), as well as CD44 and CD43E.⁵ Binding of E-selectin to its ligands facilitates the tethering and rolling of infiltrating cells on endothelial cells and promotes their extravasation into inflamed tissues.² *Sele*^{-/-} mice exhibit reduced infiltration of metastatic cancer cells to the lung, and serum soluble E-selectin levels are elevated in patients with a variety of conditions, including atherosclerosis, type 1- and type 2 diabetes, sepsis, and multiple sclerosis.⁶⁻⁹ Cayman's E-Selectin/CD62E Extracellular Domain (mouse, recombinant) protein can be used for cell-based assays. This protein is a disulfide-linked homodimer. The reduced monomer, composed of E-selectin (amino acids 29-564) fused to human IgG1 Fc at its C-terminus, consists of 777 amino acids, has a calculated molecular weight of 85.5 kDa, and a predicted N-terminus of Trp29 after signal peptide cleavage. By SDS-PAGE, under reducing conditions, the apparent molecular mass of the protein is 101 kDa due to glycosylation.

References

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