Recombinant Rat CD62L/L-Selectin Protein(Fc Tag)

Catalog Number: PDMR100048

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

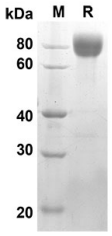
Description

Species	Rat
Source	Mammalian-derived Rat CD62L/L-Selectin proteins Trp39-Asn332, with an C-terminal Fc
Mol_Mass	57.5 kDa
Accession	P30836
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Rat CD62L/L-Selectin proteins, 2 μg/lane of Recombinant Rat CD62L/L-Selectin proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 57.5 KD

Background

For Research Use Only

Recombinant Rat CD62L/L-Selectin Protein(Fc Tag)

Catalog Number: PDMR100048

L-Selectin (also known as Leukocyte Selectin, LAM-1, LECAM-1, LECCAM-1, TQ1, Leu-8, MEL-14 antigen, DREG, lymph node homing receptor, CD62L) is a member of the Selectin family of cell surface molecules which include E-Selectin and P-Selectin. All Selectins have an extracellular domain composed of an amino-terminal calcium-dependent lectin domain, an epidermal growth factor (EGF)-like domain, two to nine short consensus repeat (SCR) units, a transmembrane domain, and a cytoplasmic tail. L-Selectin expression is limited to hematopoietic cells, with most leukocytes expressing L-Selectin at some stage of differentiation. The majority of myeloid cells, B cells, and virgin T cells express L-Selectin, while only a sub-population of memory T cells and NK cells express L-Selectin. Lymphocytes and neutrophils exhibit a reversible loss of L-Selectin after cellular activation that results from endoproteolytic release of the extracellular portion of receptor from the cell surface. Cleavage of L-Selectin from the cell surface results in a high circulating level of functionally active soluble L-Selectin. All selectins bind sialytated and fucosylated oligosaccharides that are linked to glycoproteins and glycolipids. L-Selectin specifically binds to at least three different heavily glycosolylated mucin-like proteins: GlyCAM-1, CD34, and MAdCAM-1. Multiple studies indicated that L-Selectin, P-Selectin E-Selectin collaborate to mediate the initial binding of leukocytes to endothelium at sites of tissue injury and inflammation, producing the characteristic “rolling” of leukocytes along the endothelium. L-Selectin knockout mice have a 70% decrease in rolling leukocytes in exposed mesentery and have impaired neutrophil and monocyte migration into areas of inflammation. Additionally, L-Selectin knockout mice have relatively few lymphocytes present in peripheral lymph nodes and Peyer’s patches. Short-term in vivo homing experiments in L-Selectin deficient mice demonstrate that L-Selectin is involved in lymphocyte homing to Peyer’s patches and mesenteric lymph nodes in the gut. Rat and human L-Selectin share 77% amino acid sequence homology. Rat and mouse L-Selection share 83% amino acid sequence homology.

For Research Use Only