

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat L-Selectin/CD62L in direct ELISAs and Western blots. In Western blots, approximately 20% cross-reactivity with recombinant mouse L-Selectin and 5% cross-reactivity with recombinant human L-Selectin is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat L-Selectin/CD62L Trp39-Asn332 Accession # P30836
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

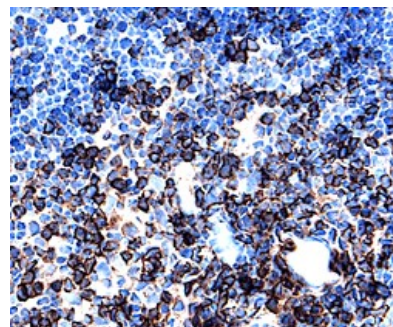
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Rat L-Selectin/CD62L Fc Chimera (Catalog # 1534-LS)
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



L-Selectin/CD62L in Rat Thymus. L-Selectin/CD62L was detected in perfusion fixed frozen sections of rat thymus using 15 µg / m L G o a t A n t i - R a t L-Selectin/CD62L Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1534) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

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 sialylated and fucosylated oligosaccharides that are linked to glycoproteins and glycolipids. L-Selectin specifically binds to at least three different heavily glycosylated 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-Selectin share 83% amino acid sequence homology (1, 2).

References:

1. Tedder, T.F. *et al.* (1995) FASEB Journ. **9**:866.
2. McEver, R.P. *et al.* (1995) J. Biol. Chem. **270**:11025.