

DP3500PS**Polyclonal Antibody to LYVE-1 - Aff - Purified****Alternate names:**

CRSBP-1, CRSBP1, Cell surface retention sequence-binding protein 1, Extracellular link domain-containing protein 1, HAR, Hyaluronic acid receptor, LYVE1, Lymphatic vessel endothelial hyaluronic acid receptor 1, XLKD1

Quantity:

50 µg

Background:

LYVE-1 has been identified as a major receptor for HA (extracellular matrix glycosamino-glycan hyaluronan) on the lymph vessel wall. The deduced amino acid sequence of LYVE-1 predicts a 322-residue type I integral membrane polypeptide 41% similar to the CD44 HA receptor with a 212-residue extracellular domain containing a single Link module the prototypic HA binding domain of the Link protein superfamily. Like CD44, the LYVE-1 molecule binds both soluble and immobilized HA. However, unlike CD44, the LYVE-1 molecule colocalizes with HA on the luminal face of the lymph vessel wall and is completely absent from blood vessels. Hence, LYVE-1 is the first lymph-specific HA receptor to be characterized and is a uniquely powerful marker for lymph vessels.

Uniprot ID:

[Q9Y5Y7](#)

NCBI:

[NP_006682.2](#)

GeneID:

[10894](#)

Host:

Rabbit

Immunogen:

Highly pure recombinant Human soluble LYVE-1 produced in insect cells (*Cat.-No* DA3525).
It consists of amino acid 24 (Ser) to 232 (Gly) and is fused to a C-terminal His-tag (6xHis).

Format:

State: Lyophilized purified IgG fraction
Purification: Antigen Affinity Chromatography
Buffer System: 5mM PBS, pH 7.2 without preservatives or stabilizers
Reconstitution: Restore in sterile water to a concentration of 0.1-1.0 mg/ml

Applications:

Immunohistochemistry on Frozen and Paraffin Embedded Sections (1-5 µg/ml).
Heat mediated antigen retrieval is recommended when staining paraffin embedded sections.
Western blot (1-2 µg/ml).
ELISA (1-15 µg/ml).
Flow Cytometry (3-20 µg/ml).
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody will detect LYVE-1 on the surface of lymphatic endothelial cells by Immunohistochemistry.
It detects a 70 kD LYVE-1 band in Western blotting.
This antibody is **not reactive** with Mouse LYVE-1.

Species Reactivity:

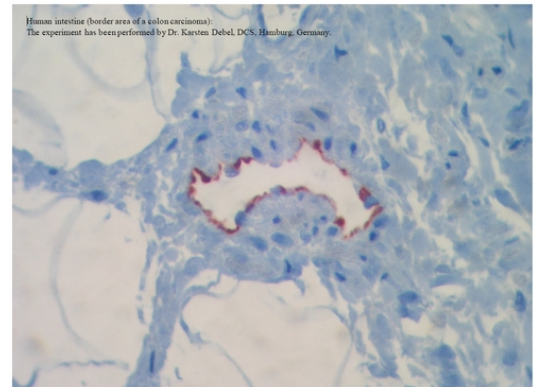
Tested: Human.

Storage: Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

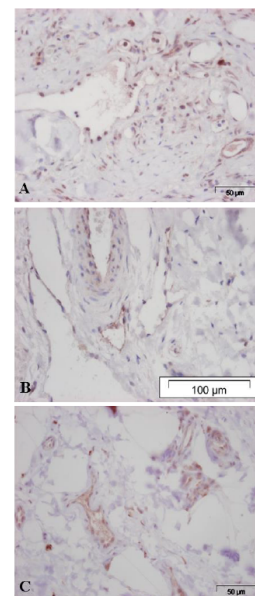
General Readings:

1. Carriera et al., Cancer Res 61:8079, 2001.
2. Jackson DG Trends Cardiovasc Med 13:1, 2003.
3. Sleeman et al., Microsc Res Tech 55:61, 2001.
4. Mäkinen et al., EMBO J 20 : 4762, 2001.

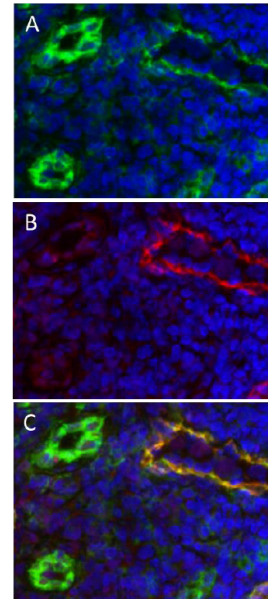
Pictures: LYVE-1 antibody staining of Human Intestine (border area of a Colon Carcinoma). *The experiment has been performed by Dr. Karsten Debel, DCS, Hamburg, Germany.*



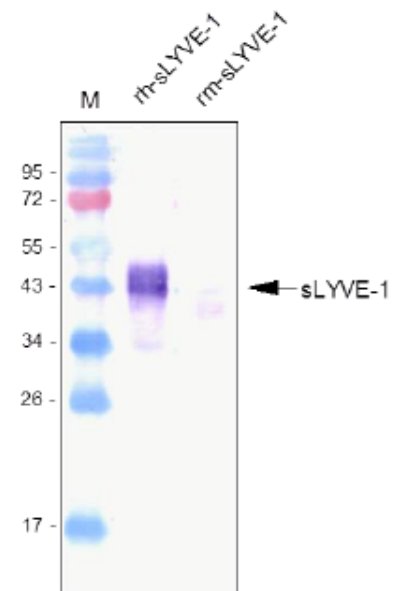
Immunohistochemical staining of the lymphatic vessels with antihuman LYVE-1 polyclonal antibody. (A) malignant canine mammary tumor; (B) benign canine mammary tumor; (C) normal canine mammary gland tissue. *The experiment was performed by the research group of Applied Veterinary Morphology – University of Antwerp.*



Cryo sections of human colon carcinoma labeled with rabbit polyclonal antibody against human LYVE-1 (red) (Cat.-No DP3500PS) and human CD31 (green). A: CD31; B: LYVE-1; C: CD31/LYVE-1



Western analysis of recombinant human sLYVE-1 (Cat.-No DA3525) and mouse sLYVE-1 (Cat.-No DA3524) using an anti-human LYVE-1 polyclonal antibody (Cat.-No DP3500PS) directed against the extracellular domain of human LYVE-1. There is more or less no cross reactivity with mouse LYVE-1.



FACS analysis with primary human dermal microvascular endothelial cells (HDMVEC).

