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LYVE1 Recombinant Rabbit mAb

Catalog # AP99930

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9Y5Y7
Other Accession	Q9Y5Y7
Reactivity	Human
Host	Rabbit
Clonality	Recombinant
Calculated MW	35213
Physical State	Liquid
Immunogen	Recombinant human LYVE1 protein
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 Link domain.
SUBUNIT	Homodimer; disulfide-linked. Interacts with PDGFB and IGFBP3. Forms a transient ternary complex with PDGFB and PDGFRB in TGN.
Post-translational modifications	O-glycosylated.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The lymphatic vasculature forms a second circulatory system that drains extracellular fluid from the tissues and provides an exclusive environment in which immune cells can encounter and respond to foreign antigen. Recently a number of interesting molecules have been identified that may be exploited as markers for lymphatic endothelium, including the hyaluronan receptor LYVE1, PALE, VEGFR3, podoplanin. LYVE1 has been identified as a major receptor for HA (extracellular matrix glycosaminoglycan hyaluronan) on the lymph vessel wall. The deduced amino acid sequence of LYVE1 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 LYVE1 molecule binds both soluble and immobilized HA. However, unlike CD44, the LYVE1 molecule colocalizes with HA on the luminal face of the lymph vessel wall and is completely absent from blood vessels. Hence, LYVE1 is the first lymph-specific HA receptor to be characterized and is a uniquely powerful marker for lymph vessels themselves.

Additional Information

Gene ID	10894
Other Names	CRSBP-1; HAR; LYVE-1; XLKD1; 1200012G08Rik; LYVE1_HUMAN; LYVE1; Cell surface retention sequence-binding protein 1 (CRSBP-1); Extracellular link domain-containing protein 1; Hyaluronic acid receptor; CRSBP1;

	LYVE1_MOUSE; lymphatic vessel endothelial hyaluronan receptor 1; extracellular link domain containing 1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	LYVE1
Synonyms	CRSBP1, HAR, XLKD1
Function	Ligand-specific transporter trafficking between intracellular organelles (TGN) and the plasma membrane. Plays a role in autocrine regulation of cell growth mediated by growth regulators containing cell surface retention sequence binding (CRS). May act as a hyaluronan (HA) transporter, either mediating its uptake for catabolism within lymphatic endothelial cells themselves, or its transport into the lumen of afferent lymphatic vessels for subsequent re-uptake and degradation in lymph nodes (PubMed:10037799). Binds to pericellular hyaluronan matrices deposited on the surface of leukocytes and facilitates cell adhesion and migration through lymphatic endothelium (PubMed:26823460).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Note=Localized to the plasma membrane and in vesicles near extranuclear membranes which may represent trans- Golgi network (TGN) and endosomes/prelysosomeal compartments. Undergoes ligand-dependent internalization and recycling at the cell surface Localizes at cell-cell junctions
Tissue Location	Mainly expressed in endothelial cells lining lymphatic vessels.

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