



Anti-human LYVE-1-Biotin

20131115BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	102-PABi50
Size:	50 µg
Lot. No.:	According to product label
Country of origin:	Germany

Preparation: Produced from sera of rabbits pre-immunized with highly pure (> 95%) recombinant human LYVE-1 (Ser24-Gly232) from insect cells.

Target Background

Synonyms:	Lymphatic vessel endothelial hyaluronic acid receptor1
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A DNA sequence encoding the extracellular domain of human LYVE-1 (Met1 to Gly232) was fused to a C-terminal His-tag (6xHis) and expressed in insect cells. Based on N-terminal sequence analysis, the primary structure of recombinant mature sLYVE-1 starts at Ser24. sLYVE-1 has a calculated monomeric molecular mass of about 25kDa but as a result of glycosylation, migrates at approximately 35 - 45 kDa under reducing conditions in SDS-PAGE.

LYVE-1 has been identified as a major receptor for HA (extracellular matrix glycosaminoglycan 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 themselves.

References

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

Database References Antigen

Protein RefSeq:	NP_006682.2
Uniprot ID:	Q9Y5Y7
mRNA RefSeq:	NM_006691.3

Product Specifications

Species reactivity	human
Clone/Ab feature	rabbit IgG
Cross reactivity	ND
Host	rabbit
Clonality	polyclonal
Purification	Antigen affinity purified
Immunogen	Recombinant human sLYVE-1 (RT #S01-028)
Formulation	lyophilized
Buffer/Stabilizer	5 mM PBS, pH 7.2; 50X BSA
Preservative	0,02% sodium azide
Conjugation	Biotin

Warnings: Reagents contain sodium azide. Under acidic conditions sodium azide yields hydrazoic acid, this is extremely toxic. Azide compounds should be diluted with running water before discarding. These precautions are recommended to avoid deposits in plumbing where explosive condition may develop.

Stability: The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

FACS: Use 3-10 µg/ml

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!



Anti-human LYVE-1

Handling/Applications

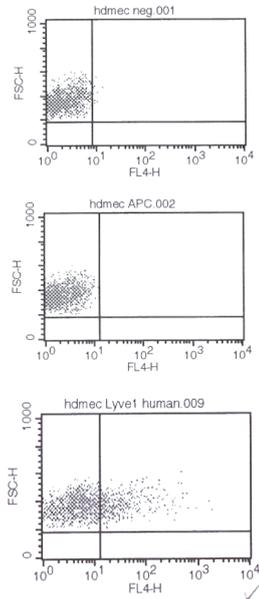


Figure 1: FACS analysis with primary human dermal microvascular endothelial cells (HDMVEC). Upper panel: no primary antibody; Middle panel: solely conjugated secondary antibody; Lower panel: Biotin-conjugated anti-human LYVE-1.