

DA3524**Recombinant Mouse Soluble LYVE-1-His - 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:

20 µg

Background:

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.

Uniprot ID:

[Q8BHC0](#)

NCBI:

[NP_444477.2](#)

GeneID:

[114332](#)

Species:

Mouse

Source:

Insect cells

Format:

State: Lyophilized protein

Purity: >95% by SDS-PAGE and visualised by silver stain

Buffer System: PBS

Stabilizers: None

Endotoxin Level: < 0.1 ng per µg of VEGF-C

Reconstitution: Lyophilized sLYVE-1 is soluble in water and most aqueous buffers. The lyophilised sLYVE-1 should be reconstituted in PBS or medium to a concentration not lower than 50 µg/ml.

Description:

Recombinant Mouse Soluble LYVE-1-His.

A DNA sequence encoding the extracellular domain of mouse LYVE-1 (Met1 - Gly228) 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 Ala24.

Result by N-terminal sequencing: ADLVQDLS

Length: 211 amino acids.

AA Sequence:

ADLVQDLSISTCRIMGVALVGRNKNPQMNFTANEACKMLGLTLASRDQVESAQKSGFETCSYGWVGEQFSV
IPRIIF

SNPRCGKNGKGVLIWNAPSSQKFKAYCHNSSDTWVNSCIPEIVTTFYPVLDQTPTATEFSVSSSAYLASSPD
STTPV

SATTRAPPLTSMARKTKKICITEVYTEPITMATETEAFVASGAAFKNEAAGHHHHHH

Molecular weight: 45 kDa 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.

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:

SDS-PAGE analysis of recombinant mouse soluble LYVE-1 from insect cells. Sample was loaded in 10% SDS-polyacrylamide gel under reducing condition and stained with Silver stain.

