**BACKGROUND**

Lymphatic vessel endothelial hyaluronan receptor-1 (LYVE-1) is expressed on the cell surface as a protein which is reduced by glycosidase treatment. LYVE-1 is abundant in spleen, lymph node, heart, lung and fetal liver, and is less abundant in appendix, bone marrow, placenta, muscle and adult liver. Expression of LYVE-1 is largely restricted to endothelial cells lining lymphatic vessels and splenic sinusoidal endothelial cells. LYVE-1 binds to both soluble and immobilized hyaluronan with greater specificity than CD44. Like CD44, the LYVE-1 molecule binds both soluble and immobilized HA. However, unlike CD44, the LYVE-1 molecule co-localizes 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. LYVE-1 is used as a marker to study tumor lymphangiogenesis, which is an important area of investigation.

**APPLICATIONS**

LYVE-1 [E9VA4] is recommended for detection of LYVE-1 of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for LYVE-1 siRNA (m): sc-42902, LYVE-1 shRNA Plasmid (m): sc-42902-SH and LYVE-1 shRNA (m) Lentiviral Particles: sc-42902-V.

Molecular Weight of LYVE-1: 40 kDa.

Molecular Weight of glycosylated LYVE-1: 60 kDa.

Positive Controls: mouse lung extract: sc-2390 or mouse lymph node extract: sc-364243.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: Lyve1 (mouse) mapping to 7 F1.

**SOURCE**

LYVE-1 (E9VA4) is a rat monoclonal antibody raised against the extracellular domain of recombinant LYVE-1 of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgM in 1.0 mL PBS with < 0.1% sodium azide and 0.1% gelatin.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.