

LYVE-1 (S-20): sc-19319

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 (HA) with greater specificity than HCAM. Like HCAM, the LYVE-1 molecule binds both soluble and immobilized HA. However, unlike HCAM, 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.

CHROMOSOMAL LOCATION

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

SOURCE

LYVE-1 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of LYVE-1 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-19319 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

LYVE-1 (S-20) is recommended for detection of LYVE-1 of mouse and rat 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

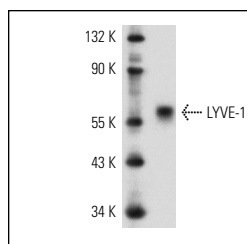
Molecular Weight of glycosylated LYVE-1: 40/60 kDa.

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

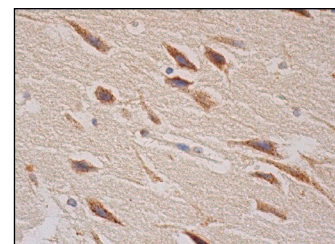
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



LYVE-1 (S-20): sc-19319. Western blot analysis of LYVE-1 expression in mouse lung tissue extract.



LYVE-1 (S-20): sc-19319. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing cytoplasmic staining of neuronal cells and endothelial cells.

SELECT PRODUCT CITATIONS

- Xu, H., et al. 2007. LYVE-1-positive macrophages are present in normal murine eyes. *Invest. Ophthalmol. Vis. Sci.* 48: 2162-2171.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **LYVE-1 (E9VA4): sc-65647**, our highly recommended monoclonal alternative to LYVE-1 (S-20).