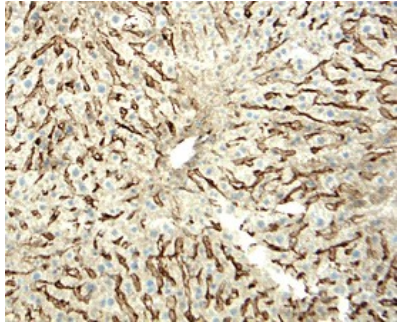
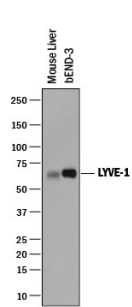


DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse LYVE-1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 15% cross-reactivity with recombinant human LYVE-1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse LYVE-1 Ala24-Thr234 Accession # Q8BHC0
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS		
Please Note: Optimal dilutions should be determined by each laboratory for each application. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.		
	Recommended Concentration	Sample
Western Blot	0.25 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA	
<p>Immunohistochemistry</p>  <p>LYVE-1 in Mouse Liver. LYVE-1 was detected in perfusion fixed frozen sections of mouse liver using 15 µg/mL Goat Anti-Mouse LYVE-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2125) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific labeling was localized to the cytoplasm of endothelial cells in sinusoids. View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.</p>	<p>Western Blot</p>  <p>Detection of Mouse LYVE-1 by Western Blot. Western blot shows lysates of mouse liver tissue and bEnd.3 mouse brain endothelial cell line. PVDF membrane was probed with 0.25 µg/mL of Goat Anti-Mouse LYVE-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2125) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for LYVE-1 at approximately 60-65 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>

PREPARATION AND STORAGE	
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Lymphatic vessel endothelial hyaluronan (HA) receptor-1 (LYVE-1) is a recently identified receptor of HA, a linear high molecular weight polymer composed of alternating units of D-glucuronic acid and N-acetyl-D-glucosamine. HA is found in the extracellular matrix of most animal tissues and in body fluids. It modulates cell behavior and functions during tissue remodeling, development, homeostasis, and disease. The turnover of HA (several grams/day in humans) occurs primarily in the lymphatics and liver, the two major clearance systems that catabolize approximately 85% and 15% of HA, respectively. LYVE-1 shares 41% homology with the other known HA receptor, CD44. The homology between the two proteins increases to 61% within the HA binding domain. The HA binding domain, known as the link module, is a common structural motif found in other HA binding proteins such as link protein, aggrecan and versican. Human and mouse LYVE-1 share 69% amino acid sequence identity.

LYVE-1 is primarily expressed on both the luminal and abluminal surfaces of lymphatic vessels. In addition, LYVE-1 is also present in normal hepatic blood sinusoidal endothelial cells. LYVE-1 mediates the endocytosis of HA and may transport HA from tissue to lymph by transcytosis, delivering HA to lymphatic capillaries for removal and degradation in the regional lymph nodes. Because of its restricted expression patterns, LYVE-1, along with other lymphatic proteins such as VEGF R3, podoplanin and the homeobox protein prospero-related (Prox-1), constitute a set of markers useful for distinguishing between lymphatic and blood microvasculature.