

## LYVE1 Protein, Mouse, Recombinant (hFc)

### General Information

Synonyms:	1200012G08Rik;Lyve-1;lymphatic vessel endothelial hyaluronan receptor 1;Xlkd1;Crsbp-1
Protein Construction:	A DNA sequence encoding the mouse LYVE1 (Q8BHC0) (Met1-Gly228) was expressed, fused with the Fc region of human IgG1 at the C-terminus. Predicted N terminal: Ala 24
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	Q8BHC0
Molecular Weight:	49.1 kDa (predicted); 63 kDa (reducing condition, due to glycosylation)

### QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

### Preparation and Storage

**Reconstitution:**  
A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

**Stability & Storage:**

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

**Shipping:**

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein Background

LYVE1, also known as LYVE-1, is a type I integral membrane glycoprotein. It contains 1 Link domain and is mainly expressed in endothelial cells lining lymphatic vessels. LYVE1 acts as a receptor and binds to both soluble and immobilized hyaluronan. It may function in lymphatic hyaluronan transport and have a role in tumor metastasis. LYVE1 also is a cell surface receptor on lymphatic endothelial cells that can be used as a lymphatic endothelial cell marker, and sort these cells for experimental purposes. It also functions as a ligand-specific transporter trafficking

between intracellular organelles and the plasma membrane. It plays a role in autocrine regulation of cell growth mediated by growth regulators containing cell surface retention sequence binding. It may act as a hyaluronan transporter, either mediating its uptake for catabolism within lymphatic endothelial cells themselves, or its transport into the lumen of afferent lymphatic vessels for subsequent re-uptake and degradation in lymph nodes.

### Reference

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Cursiefen C, et al. (2002) Lymphatic vessels in vascularized human corneas: immunohistochemical investigation using LYVE-1 and podoplanin. Invest Ophthalmol Vis Sci. 43(7):2127-35.

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