

PROPERTIES

Product Data Sheet

LYVE-1 Protein, Human (HEK293, His)

Cat. No.:	HY-P70161
Synonyms:	rHuLymphatic vessel endothelial hyaluronic acid receptor 1/LYVE-1, His; Lymphatic Vessel Endothelial Hyaluronic Acid Receptor 1; LYVE-1; Cell Surface Retention Sequence-Binding Protein 1; CRSBP-1; Extracellular Link Domain-Containing Protein 1; Hyaluronic Acid Receptor; LYVE1; CRSBP1; HAR; XLKD1
Species:	Human
Source:	HEK293
Accession:	AAH26231.1 (L20-T238)
Gene ID:	10894
Molecular Weight:	40-60 kDa

AA Sequence	LVQGSLRAEE LSIQVSCRIM GITLVSKKAN QQLNFTEAKE ACRLLGLSLA GKDQVETALK ASFETCSYGW VGDGFVVISR ISPNPKCGKN GVGVLIWKVP VSRQFAAYCY NSSDTWTNSC IPEIITTKDP IFNTQTATQT TEFIVSDSTY SVASPYSTIP APTTTPPAPA STSIPRRKKL ICVTEVFMET STMSTETEPF VENKAAFKNE AAGFGGVPT
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM Tris-Citrate, 150 mM NaCl, pH 7.0.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION Background

 LYVE-1, a ligand-specific transporter, orchestrates the trafficking of molecules between intracellular organelles, specifically the trans-Golgi network (TGN), and the plasma membrane. Functioning as a key player in the autocrine regulation of cell growth, LYVE-1 is involved in mediating the uptake and catabolism of growth regulators containing a cell surface retention sequence binding (CRS). Additionally, it exhibits potential as a hyaluronan (HA) transporter, participating in the internalization of HA for catabolism within lymphatic endothelial cells or its transport into the lumen of afferent lymphatic

vessels, leading to subsequent re-uptake and degradation in lymph nodes. Moreover, LYVE-1 forms homodimers through disulfide linkages and binds to pericellular hyaluronan matrices on leukocytes, facilitating cell adhesion and migration through lymphatic endothelium. It interacts with PDGFB and IGFBP3 and transiently forms a ternary complex with PDGFB and PDGFRB in the TGN.

Caution: Product has not been fully validated for medical applications. For research use only.

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA