Datasheet for ABIN1672871

LYVE1 ELISA Kit

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Overview

Quantity:	96 tests
Target:	LYVE1
Binding Specificity:	AA 24-238
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	31.2-2000 pg/mL
Minimum Detection Limit:	31.2 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human LYVE-1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Cell Lysate, Tissue Homogenate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: S24-T238
Specificity:	Expression system for standard: NSO Immunogen sequence: S24-T238
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g Nacl

Target Details

Target:	LYVE1
Alternative Name:	LYVE1 (LYVE1 Products)
Background:	Protein Function: Ligand-specific transporter trafficking between intracellular organelles (TGN) and the plasma membrane. Plays a role in autocrine regulation of cell growth mediated by growth regulators containing cell surface retention sequence binding (CRS). May act as a hyaluronan (HA) 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. . Background: Extracellular link domain containing 1, also known as LYVE-1 or XLKD1 is a human gene. The International Radiation Hybrid Mapping Consortium mapped the LYVE1 gene to chromosome 11p15.4. This gene encodes a type I integral membrane glycoprotein. The encoded protein acts as a receptor and binds to both soluble and immobilized hyaluronan. This protein may function in lymphatic hyaluronan transport and have a role in tumor metastasis. This gene may play a role in autocrine regulation of cell growth mediated by growth regulators containing cell surface retention sequence binding(CRS). It may act as a hyaluronan(HA) 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. Synonyms: 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,UNQ230/PRO263, Full Gene Name: Lymphatic vessel endothelial hyaluronic acid receptor 1 Cellular Localisation: Membrane, Single-pass type I membrane protein . Localized to the plasma membrane and in vesicles near extranuclear membranes which may represent trans-Golgi network (TGN) and endosomes/prelysosomeal compartments. Undergoes ligand- dependent internalization and recycling at the cell surface.
Gene ID:	10894

Target Details

UniProt:	Q9Y5Y7
Pathways:	Glycosaminoglycan Metabolic Process

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: Mainly expressed in endothelial cells lining lymphatic vessels. .
Plate:	Pre-coated
Protocol:	human LYVE-1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for LYVE-1 has been precoated onto 96-well plates. Standards(NSO, S24-T238) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for LYVE-1 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human LYVE-1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL human LYVE-1 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, cell lysates or tissue homogenates to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human LYVE-1 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 194, Standard deviation: 6.984, CV(%): 3.6 • Sample 2: n=16, Mean(pg/ml): 633, Standard deviation: 29.8, CV(%): 4.7 • Sample 3: n=16, Mean(pg/ml): 1226, Standard deviation: 79.69, CV(%): 6.5, • Sample 1: n=24, Mean(pg/ml): 255, Standard deviation: 13.26, CV(%): 5.2 • Sample 2: n=24, Mean(pg/ml): 812, Standard deviation: 47.91, CV(%): 5.9 • Sample 3: n=24, Mean(pg/ml): 1438, Standard deviation: 102.1, CV(%): 7.1
Restrictions:	For Research Use only

Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.

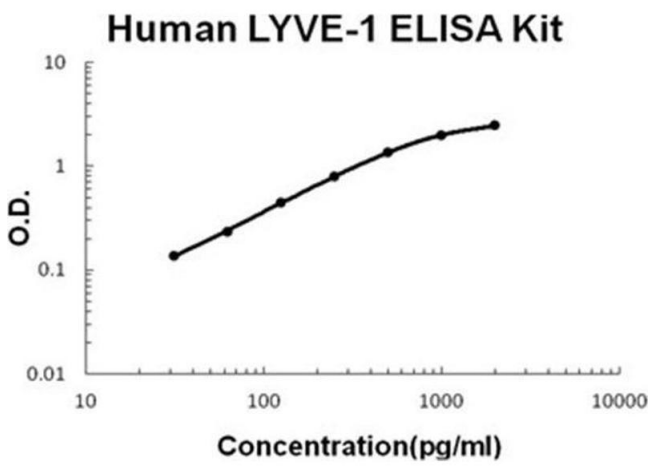
Handling

Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

Publications

Product cited in:	Du, Chen, Wang, Wen, Wang, Wang, Kan, Wei, Zhao: "VEGF-D-induced draining lymphatic enlargement and tumor lymphangiogenesis promote lymph node metastasis in a xenograft model of ovarian carcinoma." in: **Reproductive biology and endocrinology : RB&E**, Vol. 12, pp. 14, (2014) (PubMed).

Images



ELISA

Image 1. Human LYVE-1 PicoKine ELISA Kit standard curve