10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LECT1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2729a

Product Information

Application	WB, E
Primary Accession	O75829
Other Accession	O77770, P17404
Reactivity	Human, Rat, Mouse
Predicted	Rabbit, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15072
Calculated MW	37102
Antigen Region	1-30

Additional Information

Gene ID	11061
Other Names	Leukocyte cell-derived chemotaxin 1, Chondrosurfactant protein, CH-SP, Chondromodulin-1, Chondromodulin-I, ChM-I, LECT1, CHMI
Target/Specificity	This LECT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human LECT1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	LECT1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CNMD (HGNC:17005)
Function	Bifunctional growth regulator that stimulates the growth of cultured chondrocytes in the presence of basic fibroblast growth factor (FGF) but

	inhibits the growth of cultured vascular endothelial cells. May contribute to the rapid growth of cartilage and vascular invasion prior to the replacement of cartilage by bone during endochondral bone development. Inhibits in vitro tube formation and mobilization of endothelial cells. Plays a role as antiangiogenic factor in cardiac valves to suppress neovascularization.
Cellular Location	[Chondromodulin-1]: Secreted, extracellular space, extracellular matrix. Note=Accumulated in the inter-territorial matrix of cartilage
Tissue Location	Detected in cartilage and cardiac valves (at protein level). Detected in the laminae fibrosa, spongiosa and ventricularis layers of normal cardiac valves (at protein level) Expression is decreased cardiac valves of patients with valvular heart disease (at protein level). Weakly expressed in chondrosarcoma

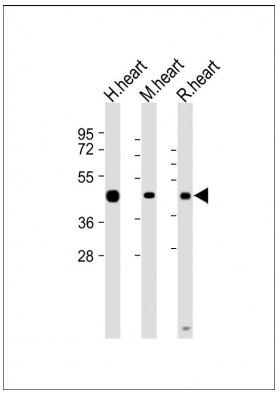
Background

LECT1 is a glycosylated transmembrane protein that is cleaved to form a mature, secreted protein. The N-terminus of the precursor protein shares characteristics with other surfactant proteins and is sometimes called chondrosurfactant protein although no biological activity has yet been defined for it. The C-terminus of the precursor protein contains a 25 kDa mature protein called leukocyte cell-derived chemotaxin-1 or chondromodulin-1. The mature protein promotes chondrocyte growth and inhibits angiogenesis. This protein expressed in the avascular zone of prehypertrophic cartilage and its expression decreases during chondrocyte hypertrophy and vascular invasion. The mature protein likely plays a role in endochondral bone development by permitting cartilaginous anlagen to be vascularized and replaced by bone. It may be involved also in the broad control of tissue vascularization during development.

References

Aoyama,T., Biochem. Biophys. Res. Commun. 365 (1), 124-130 (2008)
Yoshioka,M., Nat. Med. 12 (10), 1151-1159 (2006)
Aoyama,T., J. Biol. Chem. 279 (27), 28789-28797 (2004)

Images



All lanes : Anti-LECT1 Antibody (N-term) at 1:2000 dilution Lane 1: Human heart lysate Lane 2: Mouse heart lysate Lane 3: Rat heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 37 kDa Blocking/Dilution buffer: 5% NFDM/TBST.