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

LECT1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP2729b

Specification

LECT1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession O75829

LECT1 Antibody (C-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP2729b was selected from the C-term region of human LECT1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

LECT1 Antibody (C-term) Blocking Peptide - 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

LECT1 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

LECT1 Antibody (C-term) Blocking Peptide - Images

LECT1 Antibody (C-term) Blocking Peptide - Background

LECT1 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 is 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.

LECT1 Antibody (C-term) Blocking Peptide - 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)