

# LECT1 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP2729a

## Specification

# LECT1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

## <u>075829</u>

# LECT1 Antibody (N-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 <a href=/products/AP2729a>AP2729a</a> was selected from the N-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 (N-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 (N-term) Blocking Peptide - Protocols

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

• **Blocking Peptides** 

# LECT1 Antibody (N-term) Blocking Peptide - Images

#### LECT1 Antibody (N-term) Blocking Peptide - 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.

## LECT1 Antibody (N-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)