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AR51356PU-N Human Chondromodulin-1 (214-333, His-tag) - Purified

Alternate names: CHMI, ChM-I, Chondromodulin-I, Chondromodulin1, LECT1, Leukocyte cell-derived chemotaxin 1

Quantity: 0.5 mg

Concentration: 1.0 mg/ml (determined by Bradford assay)

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 gene 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.
Recombinant human LECT1 protein, fused to His-tag at N-terminus, was expressed in E.coli

Uniprot ID: O75829

NCBI: NP_001011705

GeneID: 11061

Species: Human

Source: E. coli

Format: **State:** Liquid purified protein
Purity: ›85% by SDS - PAGE
Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M UREA, 10% glycerol

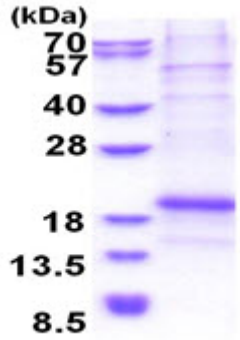
Description: Recombinant Human LECT1 protein, fused to His-tag at N-terminus, was expressed in *E.coli*.
AA Sequence:
MGSSHHHHHH SSGLVPRGSH MGSREVVRKI VPTTTKRPHS GPRSNPGAGR LNNETRPSVQ EDSQAFNPDN PYHQEGESMT FDPRLDHEGI CCIECRRSYT HCQKICEPLG GYYPWPYNYQ GCRSACRVIM PCSWWVARIL GMV
Molecular weight: 16.2 kDa (143aa)

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C to -80°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:
1. Aoyama T, Okamoto T, Fukiage K, Otsuka S, Furu M, Ito K, et al. Histone modifiers, YY1 and p300, regulate the expression of cartilage-specific gene, chondromodulin-I, in mesenchymal stem cells. J Biol Chem. 2010 Sep 24;285(39):29842-50. doi: 10.1074/jbc.M110.116319. Epub 2010 Jul 27. PubMed PMID: 20663886.
2. Miura S, Mitsui K, Heishi T, Shukunami C, Sekiguchi K, Kondo J, et al. Impairment of VEGF-A-stimulated lamellipodial extensions and motility of vascular endothelial cells

by chondromodulin-I, a cartilage-derived angiogenesis inhibitor. Exp Cell Res. 2010 Mar 10;316(5):775-88. doi: 10.1016/j.yexcr.2009.12.009. Epub 2009 Dec 21. PubMed PMID: 20026108.

Pictures:



15% SDS-PAGE (3ug)