

LD Biopharma, Inc. 7384 Trade Street, Suite B San Diego, CA 92121 Tel: 858-876-8266 http://www.ldbiopharma.com

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human LECT1 Protein

Catalog Number: HRP-2921

Manufacturer: LD Biopharma, Inc. USA

Introduction

Human Leukocyte cell-derived chemotaxin-1 (LECT1) gene encodes a bi-functional 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. It may contribute to the rapid growth of cartilage and vascular invasion prior to the replacement of cartilage by bone during endochondral bone development. LECT1 inhibits in vitro tube formation and mobilization of endothelial cells. It plays a role as anti-angiogenic factor in cardiac valves to suppress neovascularization. As single trans-membrane domain protein, LECT1 cleave into the following 2 chains: N-terminal CH-SP domain (1-210aa) and C-terminal ChM-1 domain: 215-334aa, also named as Chondromodulin-I.

Full-length ChM-1 domain of human LECT1 cDNA (215 – 334aa, derived from BC025659) was constructed with codon optimization gene synthesis and expressed with a human alpha Fetal Protein N-terminal (AFPn) -His-TEV cleavage site Tag (217aa) fusion at its N-terminal in E.coli as inclusion bodies. The final product was refolded using our unique "temperature shift inclusion body refolding" technology and chromatographically purified.

Gene Symbol: LECT1 (CNMD; MYETS1)

Accession Number: NP_008946

Species: Human

Size: 30µg / Vial

Composition: 0.3 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with

proprietary formulation of NaCl, KCl, EDTA, Sucrose, DTT and

others.

Storage: In Liquid. Keep at -80°C for long term storage. Product is stable

at 4 °C for at least 30 days.

Key References



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Applications

- 1. May be used for in vitro LECT1 mediated cell growth regulation for chondrocytes or vascular endothelial cells study in vitro with this recombinant LECT1 protein either as soluble factor or as coating matrix protein.
- 2. May be used for LECT1 (ChM-1 domain) protein-protein interaction assay.
- 3. Potential diagnostic protein, which may be used as biomarker to differentiate LECT2, which has been suggested to monitor liver fibrogenesis.
- 4. As native human ChM-1 immunogen for its specific antibody production.

Quality Control

Purity: > 92 % by SDS-PAGE.

Recombinant Human AFPn-LECT1 (ChM-I) Fusion Protein (38.3 kD)

MTLHRNEYGIASILDSYQCTAEISLADLATIFFAQFVQEATYKEVSKMVKDALTAIEKPTGDEQ SSGCLENQLPAFLEELCHEKEILEKYGHSDCCSQSEEGRHNCFLAHKKPTPASIPLFQVPEPVT SCEAYEEDRETFMNKFIYEIARRHPFLYAPTILLWAARYDKIIPSCCKAENAVECFQTKAATVT KELRESSGSHHHHHHGSENLYFQGEVVRKIVPTTTKRPHSGPRSNPGAGRLNNETRPSVQEDS QAFNPDNPYHQQEGESMTFDPRLDHEGICCIECRRSYTHCQKICEPLGGYYPWPYNYQGCRSAC RVIMPCSWWVARILGMV