

Recombinant human Thrombospondin 5/COMP protein

Catalog Number: ATGP4037

PRODUCT INFORMATION

Expression system

HEK293

Domain

21-757aa

UniProt No.

P49747

NCBI Accession No.

NP_000086.2

Alternative Names

cartilage oligomeric matrix protein, Thrombospondin-5, EDM1, EPD1, MED, PSACH, THBS5, TSP5, COMP, CTS2

PRODUCT SPECIFICATION

Molecular Weight

82.4kDa (749aa)

Concentration

0.5mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 85% by SDS - PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

COMP, also known as Thrombospondin-5, is a member of the thrombospondin(TSP) family. It is an extracellular matrix(ECM) protein primarily present in cartilage and is a secreted glycoprotein that is important for growth plate organization and function. This protein is upregulated in rheumatoid osteoarthritis and arthritis, chronic pancreatitis, hepatocellular carcinomas and pancreatic carcinomas. It is a marker of cartilage turnover. It is

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present in high quantities in fibrotic scars and systemic sclerosis, and it appears to have a role in vascular wall remodeling. It also plays a role in cell growth and development. Mutations in COMP can cause the osteochondrodysplasias pseudoachondroplasia (PSACH) and multiple epiphyseal dysplasia (MED), and up-regulated expression of COMP are observed in rheumatoid arthritis and certain carcinomas. Recombinant human COMP, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

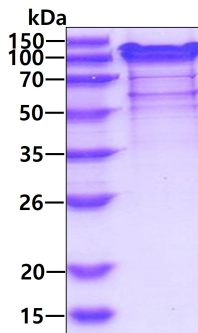
<DGSM>QGQSPL GSDLGPQMLR ELQETNAALQ DVRELLRQOV REITFLKNTV MECDACGMQQ SVRTGLPSVR
 PLLHCAPGFC FPGVACIQTE SGARCGPCPA GFTGNGSHCT DVNECNAHPC FPRVRCINTS PGFRCEACPP GYSGPTHQGV
 GLAFKANKQ VCTDINECET GQHNCVPNSV CINTRGSFQC GPCQPGFVGD QASGCQRRQA RCPDGPSPSE CHEHADCVLE
 RDGSRSCVCA VGWAGNGILC GRDTDLDGFP DEKLRCPERQ CRKDNCVTVP NSGQEDVDRD GIGDACPDPA
 DGDGVPNEKD NCPLVRNPQ RNTDEDKWDG ACDNCRSQKN DDQKDTDQDG RGDACDDDDID GDRIRNQADN
 CPRVPNSDQK DSDGDGIGDA CDNCPQKSNP DQADVDFV GDACDSDQDQ DGDGHQDSRD NCPTVPNSAQ
 EDSHDHGQGD ACDDDDDDNDG VPDSRDNCRL VPNPGQEDAD RDGVGDVCQD DFDADKVVVK IDVCPENAEV
 TLTDFRAFQT VVLDPEGDAQ IDPNWVVLNQ GREIVQTMNS DPGLAVGYTA FNGVDFEGTF HVNTVTDDDDY AGFIFGYQDS
 SSFYVVMWKQ MEQTYWQANP FRAVAEPIQ LKAVKSSTGP GEQLRNALWH TGDTEQVRL LWKDPRNVGW
 KDKKSYRWFL QHRPQVGYIR VRFYEGPELV ADSNVVLDTT MRGGRLGVFC FSQENIIWAN LRYRCNDTIP EDYETHQLRQ
 A<LEHHHHHH>

General References

Wislowska M., et al, (2005) Clin. Rheumatol. 24:278-284.
 Hou J., et al, (2000) Cell Calcium. 27:309-314.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain