# 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

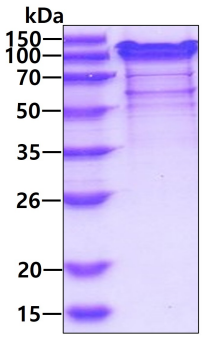
<DGSM>QGQSPL GSDLGPQMLR ELQETNAALQ DVRELLRQQV REITFLKNTV MECDACGMQQ SVRTGLPSVR PLLHCAPGFC FPGVACIQTE SGARCGPCPA GFTGNGSHCT DVNECNAHPC FPRVRCINTS PGFRCEACPP GYSGPTHQGV GLAFAKANKQ VCTDINECET GQHNCVPNSV CINTRGSFQC GPCQPGFVGD QASGCQRRAQ RFCPDGSPSE CHEHADCVLE RDGSRSCVCA VGWAGNGILC GRDTDLDGFP DEKLRCPERQ CRKDNCVTVP NSGQEDVDRD GIGDACDPDA DGDGVPNEKD NCPLVRNPDQ RNTDEDKWGD ACDNCRSQKN DDQKDTDQDG RGDACDDDID GDRIRNQADN CPRVPNSDQK DSDGDGIGDA CDNCPQKSNP DQADVDHDFV GDACDSDQDQ DGDGHQDSRD NCPTVPNSAQ EDSDHDGQGD ACDDDDDNDG VPDSRDNCRL VPNPGQEDAD RDGVGDVCQD DFDADKVVDK IDVCPENAEV TLTDFRAFQT VVLDPEGDAQ IDPNWVVLNQ GREIVQTMNS DPGLAVGYTA FNGVDFEGTF HVNTVTDDDY AGFIFGYQDS SSFYVVMWKQ MEQTYWQANP FRAVAEPGIQ LKAVKSSTGP GEQLRNALWH TGDTESQVRL 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