

## Recombinant Human COMP protein, FLAG-tagged

Cat. No. COMP-3659H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human COMP fused with FLAG tag at N-terminal was expressed in HEK293.
<b>Species</b>	Human
<b>Source</b>	HEK293
<b>ProteinLength</b>	750 AA
<b>Description</b>	The protein encoded by this gene is a noncollagenous extracellular matrix (ECM) protein. It consists of five identical glycoprotein subunits, each with EGF-like and calcium-binding (thrombospondin-like) domains. Oligomerization results from formation of a five-stranded coiled coil and disulfides. Binding to other ECM proteins such as collagen appears to depend on divalent cations. Mutations can cause the osteochondrodysplasias pseudoachondroplasia (PSACH) and multiple epiphyseal dysplasia (MED).
<b>Form</b>	Filtered (0.4 µm) and lyophilized from 0.5 mg/ml in 20mM Tris buffer, 50mM NaCl, pH 7.5
<b>Molecular Mass</b>	82.4 kDa (calculated)
<b>AA Sequence</b>	HVDYKDDDDK PAGQQQSPLG SDLGPQMLRE LQETNAALQD VRELLRQQVR EITFLKNTVM ECDACGMQQS VRTGLPSVRP LLHCAPGFCF PGVACIQTES GARCGPCPAG FTGNGSHCTD VNECNAHPCF PRVRCINTSP GFRCEACPPG

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YSGPTHQGVG LAFKANKQV CTDINECETG QHNCVPNSVC INTRGSFQCG  
 PCQPGFVGDQ ASGCQRAQR FCPDGSPSEC HEHADCVLER DGSRSCVCAV  
 GWAGNGILCG RDTDLGFPD EKLRCPERQC RKDNCVTVPN SGQEDVDRDG  
 IGDACDPDAD GDGVPNEKDN CPLVRNPDQR NTDEDKWGDA CDNCRSQKND  
 DQKDTDQDGR GDACDDIDG DRIRNQADNC PRVPNSDQKD SDGDGIGDAC  
 DNCPQKSNPD QADVDFHDFVG DACDSQDQD GDGHQDSRDN CPTVPNSAQE  
 DSDHDGQGDA CDDDDNDGV PDSRDNCRLV PNPQEDADR DGVGDVCQDD  
 FDADKVVDKI DVCPENAEVT LTFRAFQTV VLDPEGDAQI DPNWVVLNQG  
 REIVQTMNSD PGLAVGYTAF NGVDFEGTFH VNTVTDDDYA GFIFGYQDSS  
 SFYVVMWKQM EQTYWQANPF RAVAEPGIQL KAVKSSTGPG EQLRNALWHT  
 GDTESQVRLW KDPNRNVGWK DKKSRYWFLQ HRPQVGYIRV RFYEGPELVA  
 DSNVLDTTM RGGRLGVFCF SQENIIWANL RYRCNDTIPE DYETHQLRQA

**Endotoxin** < 0.1 EU/ug

**Purity** Purity as determined by densitometric image analysis: >90%

**Applications** Cell culture and/or animal studies, ELISA, Western blotting

**Storage** Store lyophilized protein at –80 centigrade. Lyophilized protein remains stable until the expiry date when stored at –80 centigrade. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at –80 centigrade for long term storage. Reconstituted protein can be stored at 4 centigrade for a limited period of time; it does not show any change after one week at 4 centigrade.

**Reconstitution** Add deionized water to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. Filter sterilize your culture media/working solutions containing this non-sterile product before using in cell culture.

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## GENE INFORMATION

**Gene Name** COMP cartilage oligomeric matrix protein [ Homo sapiens ]

**Official Symbol** COMP

**Synonyms** COMP; cartilage oligomeric matrix protein; cartilage oligomeric matrix protein (pseudoachondroplasia, epiphyseal dysplasia 1, multiple) , EDM1, EPD1, PSACH; MED; THBS5; thrombospondin 5; TSP5; thrombospondin-5; pseudoachondroplasia (epiphyseal dysplasia 1, multiple); cartilage oligomeric matrix protein(pseudoachondroplasia, epiphyseal dysplasia 1, multiple); cartilage oligomeric matrix protein (pseudoachondroplasia, epiphyseal dysplasia 1, multiple); EDM1; EPD1; PSACH; MGC131819; MGC149768;

**Gene ID** 1311

**mRNA Refseq** NM\_000095

**Protein Refseq** NP\_000086

**MIM** 600310

**UniProt ID** P49747

**Chromosome Location** 19p13.1

**Pathway** ECM-receptor interaction, organism-specific biosystem; ECM-receptor interaction, conserved biosystem; Focal Adhesion, organism-specific biosystem; Focal adhesion, organism-specific biosystem; Focal adhesion, conserved biosystem; Malaria, organism-specific biosystem; Malaria, conserved biosystem;

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**Function**

calcium ion binding; collagen binding; extracellular matrix structural constituent;  
heparan sulfate proteoglycan binding; heparin binding; protein binding;

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