

Recombinant Human COMP protein, FLAG-tagged

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

SPECIFICATION

Product Overview	Recombinant Human COMP fused with FLAG tag at N-terminal was expressed in HEK293.
Species	Human
Source	HEK293
ProteinLength	750 AA
Description	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 pseudochoondroplasia (PSACH) and multiple epiphyseal dysplasia (MED).
Form	Filtered (0.4 µm) and lyophilized from 0.5 mg/ml in 20mM Tris buffer, 50mM NaCl, pH 7.5
Molecular Mass	82.4 kDa (calculated)
AA Sequence	HVDYKDDDDK PAGQGQSPLG SDLGPQMLRE LQETNAALQD VRELLRQQVR EITFLKNTVM ECDACGMQQS VRTGLPSVRP LLHCAPGFCF PGVACIQTES GARCGPCPAG FTGNGSHCTD VNECNAHPCF PRVRCINTSP GFRCEACPPG

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

YSGPTHQGVG LAFKANKQV CTDINECETG QHNCVPNSVC INTRGSFQCG
 PCQPGFVG DQ ASGCQRRAR FCPDGSPSEC HEHADCVLER DGSRSVCVAV
 GWAGNGILCG RDTDLGFPD EKLRCPERQC RKNDCVTVPN SGQEDVDRDG
 IGDACDPDAD GDGVPNEKDN CPLVRNPDQR NTDEDKWGDA CDNCRSQKND
 DQKDTDQDGR GDACDDIDG DRIRNQADNC PRVPNSDQKD SDGDGIGDAC
 DNCPQKSNPD QADVDHDFVG DACDSQDQD GDGHQDSRDN CPTVPNSAQE
 DSDHDGQGDA CDDDDNDGV PDSRDNCRLV PNPGQEDADR DGVGDVCQDD
 FDADKVVDKI DVCPENAEVT LTDFRAFQTV 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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