

## 32-13766: COMP Human

**Format :** The COMP solution (0.5 mg/1 ml) contains phosphate buffered saline (pH 7.4) and 10% glycerol.  
**Alternative Name :** Cartilage Oligomeric Matrix Protein (pseudoachondroplasia epiphyseal dysplasia 1 multiple), MED, THBS5, TSP5, EDM1, PSACH, EPD1, Thrombospondin-5

### Description

Source: HEK293 Cells.

Physical Appearance: Sterile filtered colorless solution.

Biological Activity: null

COMP is a non-collagenous glycoprotein and belongs to the thrombospondin family of extracellular proteins. COMP is a calcium-binding protein of high molecular weight (>500 kDa) found in the extracellular matrix of articular, nasal and tracheal cartilage. COMP is not only cartilage-derived but is common in other tissues, such as synovium and tendon. Intact COMP is pentameric, with 5 equal subunits and the carboxy-terminal globular domain of native COMP binds to collagens I, II, and IX. COMP molecules are vital for conserving the properties and integrity of collagen network. Moreover, COMP has a storage and delivery function for hydrophobic cell signaling molecules such as vitamin D. Mutations of the COMP gene cause Pseudoachondroplasia and some forms of multiple epiphyseal dysplasia which implicates that it is vital that COMP develops and functions normally.

COMP Human Recombinant produced in HEK293 Cells is a single, glycosylated polypeptide chain containing 749 amino acids (21-757 a.a) and having a molecular mass of 82.4 kDa. COMP is expressed with a 6 amino acid His tag at C-Terminus and purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 10 µg / 2 µg  
**Purification :** Greater than 85.0% as determined by SDS-PAGE.  
**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.  
**Amino Acid :** ADPDAHSLWY NFTIIHLPRH GQQWCEVQSQ VDQKNFLSYD CGSDKVLSMG HLEEQLYATD  
AWGKQLEMLR EVGQRLRLEL ADTELEDFTP SGPLTLQVRM SCECEADGYI RGSWQFSFDG RKFLFDSSNN  
RKWTVVHAGA RRMKEKWEKD SGLTTFKVM SMRDCKSWLR DFLMHRKKRL EPTAPPTMAP  
GLEPKSCDKT HTCPCPAPE LLGGPSVFLF PPKPKDTLMI SRTPEVTCVV VDVSHEDPEV KFNWYVDGVE  
VHNAKTKPRE EQYNSTYRVV SVLTVLHQDW LNGKEYKCKV SNKALPAPIE KTISKAKGQP REPQVYTLPP  
SRDELTKNQV SLTCLVKGFY PSDIAVEWES NGQPENNYKT TPPVLDSGDS FFLYSKLTVD KSRWQQGNVF  
SCSVMHEALH NHYTQKLSLSL SPGKHHHHHH