# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 27-401aa

**UniProt No.** 075718

NCBI Accession No. NP\_006362

Alternative Names

Cartilage-associated protein precursor, Cartilage-associated protein precursor, CASP, LEPREL3, OI7

# **PRODUCT SPECIFICATION**

Molecular Weight 46.4 kDa (398aa)

**Concentration** 0.5mg/ml (determined by Bradford assay)

#### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

Purity

> 85% by SDS-PAGE

**Tag** His-Tag

Application SDS-PAGE,Denatured

## **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

Cartilage-associated protein precursor, also known as CRTAP, is a secreted protein localizing to the extracellular space that plays a role in collagen post-translational modifications, extracellular fibril assembly and intracellular trafficking. CRTAP is widely expressed with predominant expression in articular chondrocytes. Mutations in the gene encoding CRTAP can lead to autosomal recessive osteogenesis imperfecta (OI) type 7 and type 2B. OI, also known as brittle bone disease, is characterized by bone fragility and susceptibility to fractures. Recombinant human CRTAP protein, fused to His-tag at N-terminus, was expressed in E. coli.



### **Amino acid Sequence**

MGSSHHHHHH SSGLVPRGSH MGSQYERYSF RSFPRDELMP LESAYRHALD KYSGEHWAES VGYLEISLRL HRLLRDSEAF CHRNCSAAPQ PEPAAGLASY PELRLFGGLL RRAHCLKRCK QGLPAFRQSQ PSREVLADFQ RREPYKFLQF AYFKANNLPK AIAAAHTFLL KHPDDEMMKR NMAYYKSLPG AEDYIKDLET KSYESLFIRA VRAYNGENWR TSITDMELAL PDFFKAFYEC LAACEGSREI KDFKDFYLSI ADHYVEVLEC KIQCEENLTP VIGGYPVEKF VATMYHYLQF AYYKLNDLKN AAPCAVSYLL FDQNDKVMQQ NLVYYQYHRD TWGLSDEHFQ PRPEAVQFFN VTTLQKELYD FAKENIMDDD EGEVVEYVDD LLELEETS

### **General References**

Tonachini L., et al. (1999) Cytogenet Cell Genet. 87: 191-194. Castagnola P., et al. (1997) J Cell Sci. 110: 1351-1359.

# DATA



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

15% SDS-PAGE (3ug)