

Recombinant human MGP protein

Catalog Number: ATGP1198

PRODUCT INFORMATION

Expression system

E.coli

Domain

20-96aa

UniProt No.

P08493

NCBI Accession No.

NP_000891.2

Alternative Names

Matrix Gla protein isoform 2 precursor, GIG36, MGLAP, NTI

PRODUCT SPECIFICATION

Molecular Weight

11.8 kDa (98aa)

Concentration

1mg/ml (determined by Bradford assay)

Formulation

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

Purity

> 90% 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

MGP, also known as Matrix Gla protein, is a protein involved in regulating calcification in the extracellular matrix, in particular in cartilage and arteries. MGP is a vitamin K-dependent protein, and contains five to six residues of Gla, a Ca²⁺ binding amino acid requiring vitamin K-dependent gamma carboxylase for its formation. It is found in human bone extracts, likely formed by COOH-terminal processing by carboxypeptidase B-like enzymatic activity. Recombinant human MGP protein, fused to His-tag at N-terminus, was expressed in E. coli and denatured using detergent during a conventional chromatography purification process.

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Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH M>YESHESMES YELNPFINRR NANTFISPQQ RWRRAKVQERI RERSKPVHEL
NREACDDYRL CERYAMVYGY NAAYNRYF

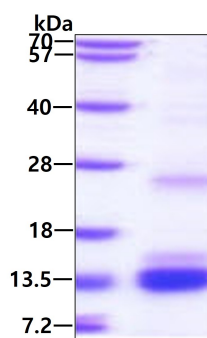
General References

Cancela L.et al. (1990) J Biol Chem. 265: 15040-15048.

Hale J.E.et al. (1991) J. Biol. Chem. 266: 21145-21149.

DATA

SDS-PAGE



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