

Recombinant Human MGP, His-tagged

Cat. No. MGP-3641H Lot. No. (See product label)

SPECIFICATION

Product Overview	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 (20-96aa).
Species	Human
Source	Human
ProteinLength	20-96 aa
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 Ca ²⁺ 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.
Form	Liquid. 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol
Molecular Weight	11.8 kDa (98aa)
Purity	> 90% by SDS - PAGE
Concentration	1.0 mg/ml (determined by Bradford assay)

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Sequences of amino acids	MGSSHHHHHH SSGLVPRGSH MYESHESMES YELNPFINRR NANTFISPQQ RWRRAKVQERI RERSKPVHEL NREACDDYRL CERYAMVYGY NAAYNRYF
Storage	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.
Pathways	Endochondral Ossification; Validated transcriptional targets of AP1 family members Fra1 and Fra2
GENE INFORMATION	
Gene Name	MGP matrix Gla protein [Homo sapiens]
Official Symbol	MGP
Synonyms	MGP; NTI; GIG36; MGLAP; matrix Gla protein; OTTHUMP00000239335; OTTHUMP00000239337; cell growth-inhibiting gene 36 protein
Gene ID	4256
mRNA Refseq	NM_000900
Protein Refseq	NP_000891
MIM	154870
UniProt ID	P08493
Chromosome Location	12p12.3
Function	calcium ion binding; extracellular matrix structural constituent; structural constituent of

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