

Matrix Gla Protein (MGP) Human, E. coli Recombinant Protein

Product Data Sheet

Cat. No.:	A1922020	A19221MG
Size:	20 µg	1 mg

Description:

Matrix Gla Protein (MGP) Human recombinantly produced in E. coli is a single, nonglycosylated polypeptide chain containing 98 amino acids (20-96) and has a molecular mass of 11.8 kDa. The MGP is fused to a 20 amino acid His-Tag at N-terminus and purified by proprietary chromatographic techniques.

Summary:

Matrix Gla protein (MGP) is member of a family of vitamin-K2 dependent, Gla-containing proteins. MGP has a high affinity binding to calcium ions, similar to other Gla-containing proteins. The protein acts as an inhibitor of vascular mineralization and plays a role in bone organization. MGP is vital for the regulation of calcification in the extracellular matrix, particularly in cartilage and arteries.

Amino Acid Sequence:

MGSSHHHHHH SSGLVPRGSH MYESHESMES YELNPFINRR NANTFISPQQ RWRAKVQERI RERSKPVHEL NREACDDYRL CERYAMVYGY NAAYNRYF

Purity:

Greater than 90%

Physical Appearance:

Sterile Filtered colorless solution.

Formulation:

The MGP solution (1 mg/ml) contains 20mM Tris-HCl buffer (pH 8.0) and 10% glycerol.



Stability:

Shipped on regular ice packs. Upon receipt, store the product at the temperature recommended below.

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.

Usage:

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