

Recombinant Human BMP3 protein

Cat. No. BMP3-922H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human BMP3 protein was expressed in Escherichia coli.
Species	Human
Source	E.coli
ProteinLength	110
Description	Bone Morphogenetic Protein 3 is one of the BMPs, some of which belong to the TGF-beta superfamily (BMP2-7). There are more than thirteen BMPs have been discovered nowadays and they are involved in inducing cartilage and bone formation. BMPs were originally identified as protein regulators of cartilage and bone formation. They have since been shown to be involved in embryogenesis and morphogenesis of various tissues and organs. BMPs also regulate the growth, differentiation, chemotaxis, and apoptosis of various cell types. Similar to most other TGF-beta family proteins, BMPs are highly conserved across animal species. At the amino acid sequence level, mature human and rat BMP-3 are 98% identical.
Form	Lyophilized from a 0.2µm filtered concentrated solution in 30 % Acetonitrile and 0.1 % TFA.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by its ability to inhibit BMP-2-induced activity in murine MC3T3-E1 cells.
Molecular Mass	Approximately 24.8 kDa, a homodimeric protein consisting of two 110 amino acid

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	non-glycosylated polypeptide chains.
AA Sequence	QWIEPRNCARRYLKVDFADIGWSEWIISPKSFDAYYCSGACQFMPKSLKPSNHATI QSIVRAVGWVPGIPEPCCVPEKMSSLSILFFDENKNVVLKVYPNMTVESCACR
Endotoxin	Less than 1 EU/g of rHuBMP-3 as determined by LAL method.
Purity	>95% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in 4 mM HCl to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	BMP3
Official Symbol	BMP3
Synonyms	BMP3; bone morphogenetic protein 3; bone morphogenetic protein 3 (osteogenic); osteogenin; BMP-3; bone morphogenetic protein-3; bone morphogenetic protein 3A; BMP-3A;
Gene ID	651

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mRNA Refseq	NM_001201
Protein Refseq	NP_001192
MIM	112263
UniProt ID	P12645

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