



Recombinant Human BMP-3

20150227BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-394S
Size:	10 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	651
Synonyms:	BMP3; BMP-3A

TGF- β family members are key modulators of cell proliferation, differentiation, matrix synthesis, and apoptosis. As implied by their name, BMPs initiate, promote, and regulate the development, growth and remodeling of bone and cartilage. In addition to this role, BMPs are also involved in prenatal development and postnatal growth, remodeling and maintenance of a variety of other tissues and organs. BMP-3 is abundantly found in adult bone, and to a lesser extent fetal cartilage. BMP-3 inhibits osteogenesis and bone formation by activating a signaling cascade that antagonizes the signaling of pro-osteogenic BMPs. Recombinant human BMP-3 is a disulfide linked homodimeric protein that corresponds to residues 361 to 472 of the 472 amino acid BMP-3 precursor protein.

Sequence

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MQWIEPRNCA RRYLKVDFAD IGWSEWIISP KSFDAYYCSG  
ACQFPMPKSL KPSNHATIQS IVRAVGVPVPG IPEPCCVPEK  
MSSLILFFD ENKNVVLKVVY PNMTVESAC R
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Database References

Protein RefSeq:	NP_001192
Uniprot ID:	P12645
mRNA RefSeq:	NM_001201

Product Specifications

Expressed in	E. coli
Purity	>95% by SDS-PAGE & HPLC analyses
Structural Information	disulphide-linked homodimer
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	111
MW:	12.5 kDa

Biological Activity: Determined by its ability to inhibit BMP-2-induced alkaline phosphatase production by ATDC-5 cells.



AVOID REPEATED FREEZE AND THAW CYCLES!