

Recombinant Human BMP-3 (Bone Morphogenetic Protein-3)

Product Description

TGF beta 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.

Typical Specifications

Species	Human
Expression	E. coli Cell Expressed
Purity	≥95%
Endotoxin	<1.0 EU/μg
Molecular Mass	25.2 kDa
Country of Origin	USA

Purity Confirmation

This was determined by SDS-PAGE gel and HPLC analysis.

Activity Assay

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

AA Sequence

MQWIEPRNCA	RRYLKVDFAD	IGWSEWIISP
KSFDAYYCSG	ACQFPMPSL	KPSNHATIQS
IVRAVGVPVPG	IPECCVPEK	MSSLSILFFD
ENKNVVLKVY	PNMTVESCAC	R

Reconstitution Buffer

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex.

Storage

For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% HSA) and store in working aliquots at -20°C to -80°C.

Limited Use and Restrictions

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