

Recombinant Human BMP-13 (Bone Morphogenetic Protein-13)

Product Description

BMP-13 is expressed in hypertrophic chondrocytes during embryonic development of long bones. Continued postnatal expression of BMP-13 in articular cartilage suggests that it plays a regulatory role in the growth and maintenance of articular cartilage. Adenovirus-mediated BMP-13 gene transfer to rabbit bone marrow stem cells have been reported to augment periosteal repair of osteochondral defects. The functional form of BMP-13/CDMP-2 is a disulfide-linked homodimer of two 120 amino acid polypeptide chains. This 27.5 kDa protein is obtained by proteolytic processing of a biologically inactive precursor protein of 97.7 kDa. Recombinant Human BMP-13/CDMP-2 is a 27.0 kDa homodimeric disulfide-linked protein consisting of two 120 amino acid polypeptide chains.

Typical Specifications

Species	Human
Expression	E. coli Cell Expressed
Activity	Typically 2.0-3.0 µg/mL ED ₅₀
Purity	≥95%
Endotoxin	<1.0 EU/µg
Molecular Mass	27.0 kDa
Country of Origin	USA

Purity Confirmation

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

Activity Assay

Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells.

AA Sequence

TAFASRHGKR	HGKKSRLRCS	KKPLHVNFKK
LGWDDWIIAP	LEYEAYHCEG	VCDFPLRSHL
EPTNHAIQQT	LMNSMDPGST	PPSCCVPTKL
TPISILYIDA	GNNVVYKQYE	DMVVESCGCR

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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