

Product Information Sheet

Recombinant Human BMP-2

Catalog# 120-02

Source: *E.coli*

Description: BMP-2 is a potent osteoinductive cytokine, capable of inducing bone and cartilage formation in association with an osteoconductive carrier such as collagen and synthetic hydroxyapatite. In addition to its osteogenic activity, BMP-2 appears to play an important role in cardiac morphogenesis, and is expressed in a variety of other tissues including lung, liver, spleen, prostate, ovary, and small intestine. The functional form of BMP-2 is a 26 kDa protein composed of two identical 114 amino-acid polypeptide chains (monomers) linked by a single disulfide bond. Each BMP-2 monomer is expressed as the C-terminal part of a precursor polypeptide, which also contains a 23 amino-acid signal sequence for secretion, and a 259 amino-acid propeptide. After dimerization of this precursor, the covalent bonds between the propeptide (which is also a disulfide-linked homodimer) and the mature BMP-2 ligand are cleaved by a furin-type protease. Recombinant human BMP-2 is a 26.0 kDa homodimeric disulfide-linked protein consisting of two identical 115 amino acid chains.

Synonyms: BMP-2A

Sequence: MQAKHKQRKR LKSSCKRHPL YVDFSDVGWN DWIVAPPGYH AFYCHGECFP PLADHLNSTN HAIVQTLVNS VNSKIPKACC
VPTELSAISM LYLDENEKVV LKNYQDMVVE GCGCR

Authenticity: Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Purity: $\geq 98\%$ by SDS-PAGE gel and HPLC analyses.

Endotoxin: Endotoxin level is < 0.1 ng/ μ g of protein (< 1 EU/ μ g).

Protein Content: Verified by UV Spectroscopy and/or SDS-PAGE gel.

Biological activity: Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells. The expected ED₅₀ for this effect is 0.5-1.0 μ g/ml.

For a list of references please visit our website at www.peprotech.com

Country of Origin: USA

Lot-specific information is not available on Product Information Sheet.
See Certificate of Analysis for details.

Usage: For Research Use Only. Not for use in diagnostic or therapeutic procedures.

Storage/Stability:

Product Form	Temperature	Storage Time
Lyophilized	-20°C to -80°C	See expiration date
Lyophilized	4°C	6 months
Lyophilized	RT	1 month
Diluted as per CoA	-20°C to -80°C	12 months
Diluted as per CoA	2°C to 8°C	1 week
**Avoid repeated freeze-thaw cycles.		