



## Bone Morphogenetic Protein-2, human recombinant (rHuBMP-2)

**Catalog No:** 54299  
**Lot No:** XXXXX  
**Source:** *E. coli*  
**Synonyms:** BMP-2, BMP2A

### Background

BMP2 belongs to the transforming growth factor-beta (TGFB) superfamily. Bone morphogenic protein induces bone formation. BMP2 is a candidate gene for the autosomal dominant disease of fibrodysplasia (myositis) ossificans progressiva.

### Description

Bone Morphogenetic protein-2 human recombinant produced in *E. coli* is a homodimeric, non-glycosylated polypeptide chain containing 2x115 amino acids and having a molecular mass of 26 kDa. BMP-2 is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

### Formulation

BMP2 was lyophilized from a concentrated (1 mg/ml) sterile solution containing 10 mM sodium citrate pH 3.5.

### Solubility

It is recommended to reconstitute the lyophilized BMP-2 in sterile 20 mM AcOH (acetic acid) not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized Bone Morphogenetic Protein-2, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution BMP2 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

### Purity

Greater than 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

### Amino Acid Sequence

MQAKHKQRKR LKSSCKRHPL YVDFSDVGWN DWIVAPPGYH AFYCHGECPF PLADHLNSTN HAIVQTLVNS VNSKIPKACC  
VPTELSAISM LYLDENEKVV LKNYQDMVVE GCGCR

### Activity

The ED50 as determined by its ability to induce alkaline phosphatase production by ATDC-5 cells is 0.5 - 1.0 µg/ml.

### Usage

**This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.**

## CONTACT US TODAY

BIOMOL GmbH • Kieler Straße 303a • 22525 Hamburg • Germany • [info@biomol.de](mailto:info@biomol.de) • [www.biomol.de](http://www.biomol.de)

Fon: +49 (0)40-853 260 0 • TOLL FREE IN GERMANY: Fon: 0800-246 66 51