

# Human / Mouse / Rat / Rhesus / Canine BMP-2 / BMP2A Protein

Catalog Number: 10426-HNAE



Sino Biological  
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## General Information

### Gene Name Synonym:

BMP2

### Protein Construction:

A DNA sequence encoding the mature form of human / mouse / rat / rhesus / canine BMP2 (NP\_001191.1) (Gln283-Arg396) was expressed with an initial Met. The mature form sequences of human, mouse, rat, rhesus and canine BMP2 are identical.

**Source:** Human, Mouse, Rat, Rhesus, Canine

**Expression Host:** E. coli

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE

### Bio Activity:

**Measured by its ability to induce alkaline phosphatase production by MC3T3-E1 mouse osteoblastic cells. The ED<sub>50</sub> for this effect is typically 0.1-0.5µg/mL.**

### Endotoxin:

< 1.0 EU per µg protein as determined by the LAL method.

**Predicted N terminal:** Met

### Molecular Mass:

The recombinant human / mouse / rat / rhesus / canine BMP2 consists of 115 amino acids and has a predicted molecular mass of 13 kDa. It migrates as an approximately 14 & 27 kDa band in SDS-PAGE under reducing conditions, corresponding to the monomer and homodimer.

### Formulation:

Lyophilized from sterile 3% CAN, .1 % TFA

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

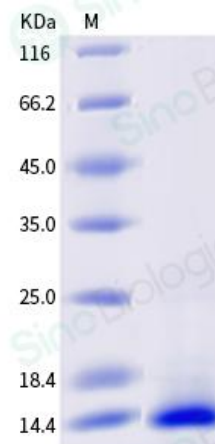
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

BMP-2 protein, like other bone morphogenetic proteins, plays an important role in the development of bone and cartilage. BMP-2 protein is involved in the hedgehog pathway, TGF beta signaling pathway, and cytokine-cytokine receptor interaction. BMP-2 and BMP-7 are osteogenic BMPs that have been demonstrated to potentially induce osteoblast differentiation in a variety of cell types. BMP-2, BMP-4 and BMP-7 are known to be of major importance in bone formation and repair. In cancerous tissues BMP-2 protein may play an important role in the progression of glioma.

## References