

# Recombinant Human/Mouse/Rat mature BMP-2 Protein www.abclonal.com

Catalog No.: RP02510S Recombinant

### **Sequence Information**

Species Gene ID Swiss Prot Human,Mous 650 P12643 e.Rat

**Tags**No tag

Synonyms

BDA2;BMP2A;BMP2

### **Product Information**

Source Purification
E.coli ≥ 95 % as
determined by SDSPAGE.

### Calculated MW Observed MW

12.78 kDa 15-20 kDa

#### **Endotoxin**

< 1 EU/µg of the protein by LAL method.

#### **Formulation**

Lyophilized from a 0.22  $\mu m$  filtered solution of 0.1% TFA, 30% ACN. Contact us for customized product form or formulation.

#### Reconstitution

Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

### **Contact**

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### **Background**

BMP-2 like other bone morphogenetic proteins, plays an important role in the development of bone and cartilage. It is involved in the hedgehog pathway, TGF beta signaling pathway, and in cytokine-cytokine receptor interaction. It is also involved in cardiac cell differentiation and epithelial to mesenchymal transition. Like many other proteins from the BMP family, BMP-2 has been demonstrated to potently induce osteoblast differentiation in a variety of cell types. BMP-2 may be involved in white adipogenesis and may have metabolic effects.

### **Basic Information**

### Description

Recombinant Human/Mouse/Rat mature BMP-2 Protein is produced by Escherichia coli expression system. The target protein is expressed with sequence (Ala284-Arg396) of Human/Mouse/Rat BMP-2 (NP\_001191.1) fused with no tag.

### **Bio-Activity**

Measured by its ability to induce alkaline phosphatase production by ATDC5 mouse chondrogenic cells. The ED $_{50}$  for this effect is 24.59-98.36 ng/mL, corresponding to a specific activity of  $1.02\times10^4\sim4.07\times10^4$  units/mg.

### **Shipping**

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

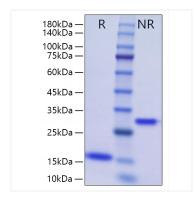
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

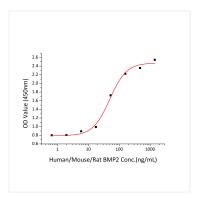
### **Operational Notes**

For your safety and health, please wear a lab coat and disposable gloves for handling.

## **Validation Data**



Recombinant Human/Mouse/Rat mature BMP-2 Protein was determined by SDS-PAGE under reducing (R) and non-reducing (NR) conditions.



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