

# Recombinant Human/Mouse/Rat mature BMP-2 Protein

Catalog No.: RP02510S **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	650	P12643

### Tags

No tag

### Synonyms

BDA2;BMP2A;BMP2

## Product Information

Source	Purification
E.coli	> 95% by SDS-PAGE.

### Endotoxin

&lt; 1 EU/μg of the protein by LAL method.

### Formulation

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

### Reconstitution

Please contact us for reconstitution instructions.

## 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<sub>50</sub> for this effect is 24.59-98.36 ng/mL, corresponding to a specific activity of 1.02×10<sup>4</sup>~4.07×10<sup>4</sup> units/mg.

### Storage

Store the lyophilized protein at -20°C to -80°C for 12 months.

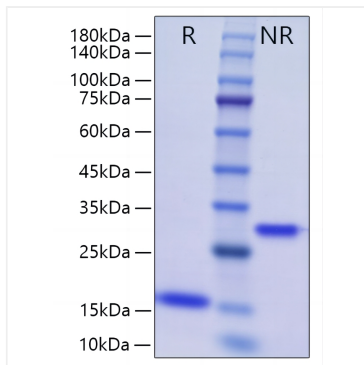
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

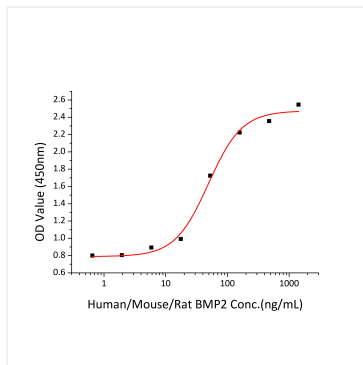
## Contact

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## Validation Data



Recombinant Human/Mouse/Rat mature BMP-2 Protein was resolved with SDS PAGE under reducing (R) and non-reducing (NR) conditions showing single bands at 15-20 kDa and 25-30 kDa, respectively.



Recombinant Human/Mouse/Rat mature BMP-2 Protein 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  $1.02 \times 10^4 \sim 4.07 \times 10^4$  units/mg.