

# Recombinant Human Mature BMP-4 Protein

Catalog No.: RP02512S1 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	652	P12644

**Tags**  
No-Tag

### Synonyms

BMP4; BMP2B; DVR4; Bone morphogenetic protein 4; BMP-4; Bone morphogenetic protein 2B; BMP-2B

## Product Information

Source	Purification
HEK293 cells	> 97 % as determined by SDS-PAGE

Calculated MW	Observed MW
13.13 kDa	15-25 kDa

**Endotoxin**  
< 0.01 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from a 0.22 μm filtered solution of 50mM acetic acid, pH3.6.

### Reconstitution

Centrifuge the vial before opening. 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 stabilizer (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

Recombinant Human Mature BMP-4 Protein that in humans is encoded by BMP4 gene. BMP4 is a member of the bone morphogenetic protein family which is part of the transforming growth factor-beta superfamily. The superfamily includes large families of growth and differentiation factors. BMP4 is highly conserved evolutionarily. BMP4 is found in early embryonic development in the ventral marginal zone and in the eye, heart blood and otic vesicle.

## Basic Information

### Description

Recombinant Human Mature BMP-4 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ser293-Arg408) of Human Mature BMP-4 (Accession #NP\_001193.2) fused with no tag.

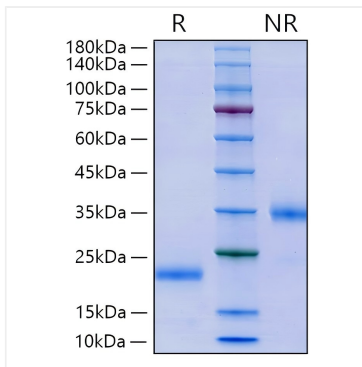
### Bio-Activity

Measured by its ability to induce alkaline phosphatase production by ATDC5 mouse chondrogenic cells. The ED<sub>50</sub> for this effect is 5.88-23.52 ng/mL, corresponding to a specific activity of 4.25×10<sup>4</sup>~1.70×10<sup>5</sup> units/mg.

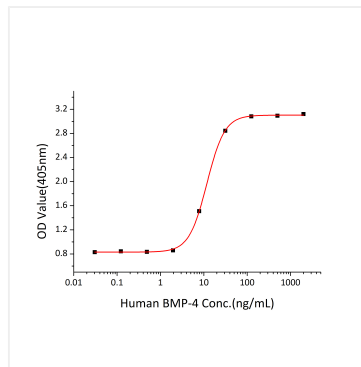
### Storage

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.

## Validation Data



Recombinant Human Mature BMP-4 Protein was resolved with SDS PAGE under reducing (R) and non-reducing (NR) conditions.



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