

**Recombinant Human BMP-4**  
**Catalog # PBG10043****Specification**

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**Recombinant Human BMP-4 - Product Information****Recombinant Human BMP-4 - Additional Information****Description**

Bone morphogenetic proteins (BMPs) constitute a subfamily within the TGF- $\beta$  superfamily of structurally related signaling proteins. Members of this superfamily are widely distributed throughout the body and are involved in diverse physiological processes during both pre- and postnatal life. Like BMP-7, BMP-4 is involved in the development and maintenance of bone and cartilage. Reduced expression of BMP-4 is associated with a number of bone diseases, including the heritable disorder Fibrodysplasia Ossificans Progressiva. PeproTech's *E.coli* derived BMP-4 is a fully active homodimeric protein consisting of two 106 amino acid subunits which correspond to amino acids 303-408 of the full length BMP-4 precursor.

**Biological Activity**

Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells. The expected  $\text{ED}_{50}$  for this effect is 5-10 ng/ml.

**Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**Endotoxin**

Endotoxin level is  $<0.1 \text{ ng/}\mu\text{g}$  of protein ( $<1\text{EU/}\mu\text{g}$ ).

**Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

**Storage**

-20°C

**Precautions**

Recombinant Human BMP-4 is for research use only and not for use in diagnostic or therapeutic procedures.

**Recombinant Human BMP-4 - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

## **Recombinant Human BMP-4 - Images**