

## Recombinant Human BMP4 / Bone Morphogenetic Protein 4, Animal Free & Carrier Free

Cat #: C-CYP250

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

### Product Overview

Bone morphogenetic protein 4 is a protein that in humans is encoded by BMP4 gene. BMP4 is found on chromosome 14q22-q23. 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.

### Product Information

**Source:** *Escherichia Coli*.

**Purity:** >95% as determined by SDS-PAGE. Ni-NTA chromatography.

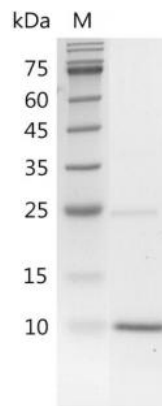
**Biological Activity:** Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED<sub>50</sub> for this effect is < 0.58 ng/mL.

**Endotoxin:** <0.1EU per 1µg of the protein by the LAL method.

**Amino acid sequence:**

MKKNKNCRRHSLYVDFSDVGWNDWIVAPPGYQAFYCHGDCPFPLADHLNSTNHAIVQTLVNSVNSSIPKACCVPTELSAISMLYLDEYDK  
VVLKNYQEMVVEGCGCR with polyhistidine tag at the C-terminus.

**Formulation:** Lyophilized from a sterile filtered aqueous solution in 20 mM sodium carbonate, pH 9.0



SDS-PAGE analysis of recombinant human BMP4

## Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H<sub>2</sub>O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

## Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

## Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.