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# BMP2

# Recombinant Human, Mouse, Rat, Rhesus, Canine BMP-2 / BMP-2A

| | | | |
|---|---|---|---|
| **Catalog No.** | CRH480A | **Quantity:** | 20 µg |
| | CRH480B | | 100 µg |
| | CRH480C | | 1.0 mg |

**Alternate Names:** Bone morphogenetic protein 2, BMP-2, Bone morphogenetic protein 2A, BMP-2A

**Description:** BMP-2 protein, like other bone morphogenetic proteins, plays an important role in the development of bone and cartilage. BMP-2 protein is involved in the hedgehog pathway, TGF beta signaling pathway, and cytokine-cytokine receptor interaction. BMP-2 and BMP -7 are osteogenic BMPs that have been demonstrated to potently induce osteoblast differentiation in a variety of cell types. BMP-2, BMP-4 and BMP-7 are known to be of major importance in bone formation and repair. In cancerous tissues BMP-2 protein may play an important role in the progression of glioma.

**UniProt ID:** P12643

**Accession Number:** NP_001191.1

**Protein Construction:** A DNA sequence encoding the mature form of human BMP-2 (Gln283-Arg396) was expressed. **The mature form sequences of human, mouse, rat, rhesus and canine BMP-2 are identical.**

**Source:** E. coli

**Formulation:** Lyophilized from sterile 30 % ACN, 0.1 % TFA, pH 2.9.
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

**Molecular Weight:** The recombinant human BMP-2 monomer consists of 115 amino acids and has a predicted molecular mass of 13 kDa.

**Purity:** > 95 % as determined by SDS-PAGE

**Biological Activity:** Measured by its ability to induce alkaline phosphatase production by MC3T3-E1 mouse osteoblastic cells. The ED50 for this effect is typically 0.1-0.5µg/mL.

**Predicted N-terminal:** Met

**Reconstitution:** **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial.
**DO NOT VORTEX**. Allow several minutes for complete reconstitution.

**Storage & Stability:** Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
**Avoid repeated freeze-thaw cycles.**

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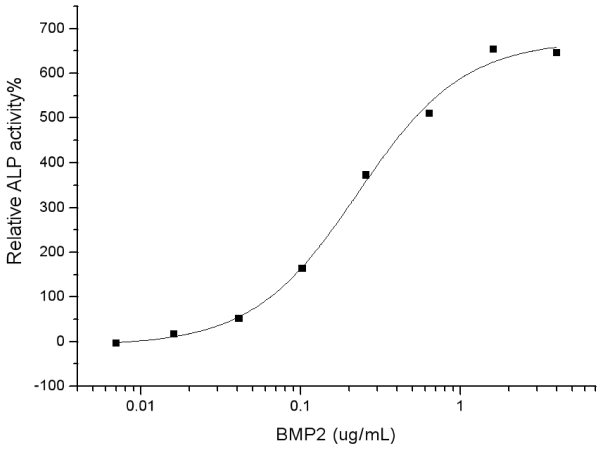
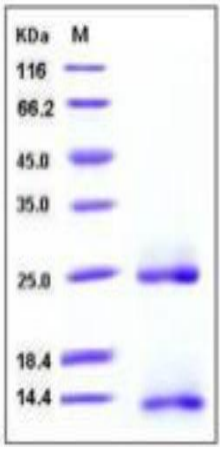



SDS-PAGE

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