

## BMP2

# Recombinant Human/Mouse/Rat Bone Morphogenetic Protein 2

<b>Catalog No.</b>	CRB100A	<b>Quantity:</b>	2 µg
	CRB100B		10 µg
	CRB100C		1.0 mg
	CRB100D		100 µg

**Alternate Names:** BMP2A, bone morphogenetic protein 2

**Description:** Bone Morphogenetic Protein 2 is a member of the BMP family of proteins, which are important for the development of bone and cartilage. BMP-2 through 7 belong to the TGF-beta superfamily. BMP-2 is produced as a pre/pro-protein, which is proteolytically processed to generate each subunit of the disulfide-linked homodimer, BMPs signal through type I and type II receptor tyrosine kinases and through SMAD proteins. Recombinant Human BMP-2 is a homodimer with 100% sequence homology with mouse and rat BMP-2.

**Gene ID:** 650 human

**Protein Accession No:** P12643 human

**Source:** *E. coli*

**Molecular Weight:** Dimer, 13.0/26.1 kDa (115 aa/330 aa)

**Formulation:** Lyophilized from a sterile-filtered solution containing 0.1% Trifluoroacetic Acid (TFA).

**Purity:** ≥95% by reducing and non-reducing SDS-PAGE.

**Endotoxin Level:** ≤1 EU/µg, determined by kinetic LAL analysis.

**Biological Activity:** ≤ 250 ng/ml, determined by induced alkaline phosphatase activity in mouse ATDC-5 cells.

**Specific Activity:** ≥ 4.0 x 10<sup>3</sup> U/mg

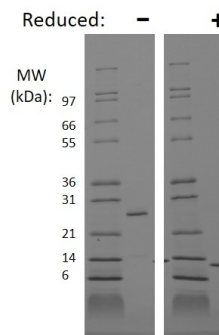
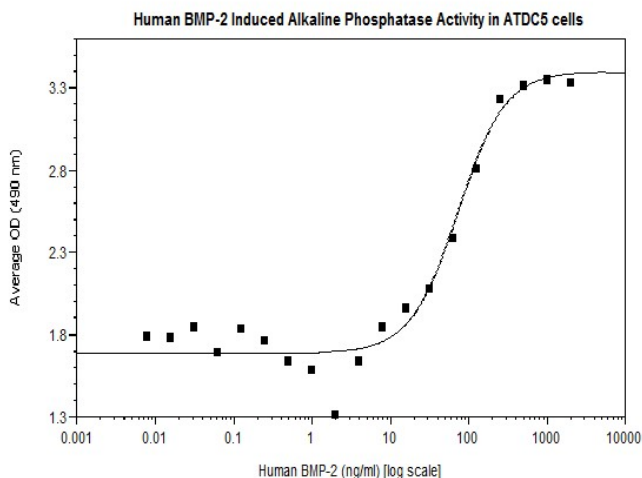
**Amino Acid Sequence:** MQAKHKQRKR LKSSCKRHPL YVDFSDVGWN DWIVAPPGYH AFYCHGECPF  
PLADHLNSTN HAIVQTLVNS VNSKIPKACC VPTELSAISM LYLDENEKVV  
LKNYQDMVVE GCGCR

**Reconstitution:** **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/ml. **DO NOT VORTEX.** Allow several minutes for complete reconstitution. Further dilution should be made in appropriate buffered solutions containing a carrier protein such as 0.1% BSA.



**Storage & Stability:**

Lyophilized product is stable at room temperature for shipping purposes. Upon receipt, store as supplied, for up to 1 year at -20°C to -80°C. Upon reconstitution, the preparation is stable for up to one month at 2-8°C. For long term storage, freeze in working aliquots and store at -20 to -80°C. **Avoid repeated freeze-thaw cycles.**



**Human BMP-2 Gel**

1 ug in each lane (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human BMP-2 has a predicted MW of 26.0 kDa as a homodimer (with each subunit having a MW of 13.0 kDa).

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

