BMP4
Recombinant Human BMP-4 active

Catalog No.	CRC404A	**Quantity:**	5 µg
	CRC404B		100 µg
	CRC404C		1.0 mg

Alternate Names: BMP4, BMP2B, BMP2B1, bone morphogenetic protein 4

Description: BMP-4 is a member of the bone morphogenetic protein family which is part of the TGF-β superfamily of structurally related signaling proteins. Like other bone morphogenetic proteins, BMP-4 promotes bone and cartilage development, specifically tooth and limb development and fracture repair. BMP-4 is a critical signaling molecule required for early differentiation of the human embryo and establishing a dorsal ventral axis. Recombinant human BMP-4 is a disulfide-linked homodimer consisting of two 13.1 kDa, glycosylated, polypeptide chains, each containing 116 amino acids.

Gene ID: 652

Protein Accession No: P12644

Source: CHO cells

Molecular Weight: 13.1/26.2 kDa, predicted.

Formulation: Lyophilized from a sterile aqueous solution containing 0.1% TFA

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

Endotoxin Level: ≤1 EU/µg of protein

Biological Activity: The ED_{50} as determined by dose-dependent induction of alkaline phosphatase activity of ATDC-5 cells is in the range of 2-12 µg/ml.

Specific Activity: ≥ 6.7 x 10^4 units/mg

Amino Acid Sequence: SPKHHSQRAR KKNKNCRRHS LYVDFSDVGW NDWIVAPPGY QAFYCHGDCP FPLADHLNST NHAI VQT LVN SVNSSIPKAC CVPTELSAIS MLYLDEYDKV VLKNYQEMVV EGCGCR

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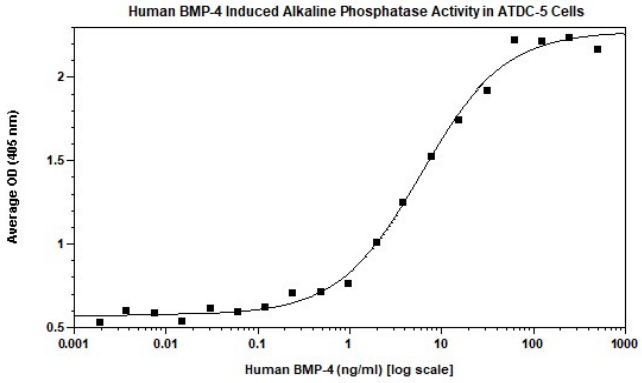
Reconstitution: **Centrifuge vial prior to opening.** Reconstitute with sterile water at 0.1 to 1.0 mg/ml. Mix by gently pipetting the solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For long term storage, dilute to working aliquots in a 0.1% BSA or 0.1% HSA solution. Avoid repeated freeze/thaw cycles.

Storage & Stability: The lyophilized protein is stable as supplied for 12 months at -20°C to -80°C. Reconstituted as directed, BMP-4 is stable for 1 month at 4°C, 3 months at -20°C to -80° C.



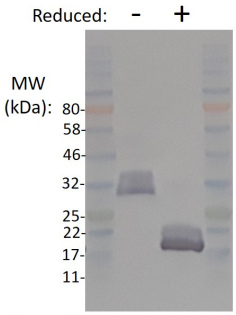


Figure: 100 ng of purified recombinant human BMP-4 per lane was run under non-reducing and reducing conditions in a 4-20% Tris-glycine gel. Samples were analyzed via western blot with an anti-human BMP-4 mouse monoclonal antibody (clone 66119).
Human BMP-4 is a homodimer with a predicted MW of 13.1 kDa for each monomer and 26.2 kDa as a dimer. The protein is produced in CHO cells and is detected at a larger MW due to glycosylation.

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

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