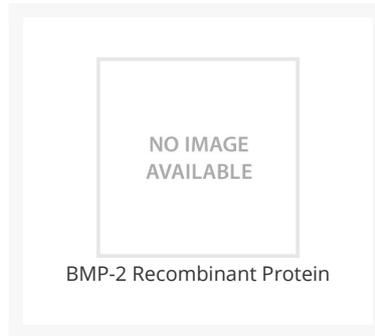




# BMP-2 Recombinant Protein

Cat. No.: 40-640



## Ψ Specifications

<b>SPECIES:</b>	Human, Mouse
<b>SOURCE SPECIES:</b>	CHO cells
<b>SEQUENCE:</b>	QAKHKQRKRL KSSCKRHPLY VDFSDVGWND WIVAPPGYHA FYCHGECPPF LADHLNSTNH AIVQTLVNSV NSKIPKACCV PTELSAISML YLDENEKVVL KNYQDMVVEG CGCR

## Ψ Properties

<b>PURITY:</b>	≥ 95% by SDS-PAGE gel and HPLC analyses.
<b>PHYSICAL STATE:</b>	Lyophilized
<b>STORAGE CONDITIONS:</b>	The recombinant protein is stable for at least 2 years from date of receipt at -20 °C. Reconstituted protein is stable for at least 3 months when stored in working aliquots with a carrier protein at -20 °C. As with any protein, exposing the recombinant protein to repeated freeze / thaw cycles is not recommended. When working with proteins care should be taken to keep recombinant protein at a cool and stable temperature.

## Ψ Additional Info

<b>OFFICIAL SYMBOL:</b>	BMP2
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<b>ALTERNATE NAMES:</b>	Bone Morphogenetic Protein-2, BMP-2A
<b>GENE ID:</b>	650

## Background and References

<b>BACKGROUND:</b>	<p>BMPs (Bone Morphogenetic Proteins) belong to the TGF-<math>\beta</math> superfamily of structurally related signaling proteins. BMP-2 is a potent osteoinductive cytokine, capable of inducing bone and cartilage formation in association with an osteoconductive carrier such as collagen and synthetic hydroxyapatite. In addition to its osteogenic activity, BMP-2 appears to play an important role in cardiac morphogenesis, and is expressed in a variety of other tissues, including lung, liver, spleen, prostate, ovary, and small intestine. The functional form of BMP-2 is a 26 kDa protein composed of two identical 114 amino acid polypeptide chains (monomers) linked by a single disulfide bond. Each BMP-2 monomer is expressed as the C-terminal part of a precursor polypeptide, which also contains a 23 amino acid signal sequence for secretion, and a 259 amino acid propeptide. After dimerization of this precursor, the covalent bonds between the propeptide (which is also a disulfide-linked homodimer) and the mature BMP-2 ligand are cleaved by a furin-type protease. Recombinant Human/Murine/Rat BMP-2 derived from CHO cells is a homodimeric glycoprotein that consists of two 114 amino acid polypeptide chains linked by a single disulfide bond. Due to glycosylation, CHO cell-derived Human/Murine/Rat BMP-2 migrates at an apparent molecular weight of approximately 28-29 kDa by SDS-PAGE analysis under non-reducing conditions.</p>
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