

## 32-20558: Recombinant Human/Murine/Rat BMP-2 (CHO derived)(Discontinued)

**Reactivity :** Human, Mouse

**Alternative Name :** Bone Morphogenetic Protein-2, BMP-2A

### Description

#### Source:CHO cells

BMPs (Bone Morphogenetic Proteins) belong to the TGF-Beta 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.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Purity: >= 95% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** QAKHKQRKRL KSSCKRHPLY VDFSVDGWND WIVAPPGYHA FYCHGECPPF LADHLNSTNH AIVQTLVNSV  
NSKIPKACCV PTELSAISML YLDENEKVVL KNYQDMVVEG CGCR

### Application Note

Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells. The expected ED<sub>50</sub> for this effect is 40-100 ng/ml.