

## Recombinant Human Bone Morphogenetic Protein-2

Cat. No. BMP2-22H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human Bone Morphogenetic Protein-2 produced in CHO is a homodimeric, glycosylated, Polypeptide chain containing 115 amino acids and having a calculated molecular mass of 26018 Dalton. Due to its glycosilation, BMP-2 migrates on SDS-PAGE under non-reducing conditions at 36kDa and 18kDa under reducing conditions. The BMP-2 CHO derived protein is purified by proprietary chromatographic techniques.
<b>Species</b>	Human
<b>Source</b>	CHO
<b>Description</b>	BMP2 belongs to the transforming growth factor-beta (TGFB) superfamily. Bone morphogenic protein induces bone formation. BMP2 is a candidate gene for the autosomal dominant disease of fibrodysplasia (myositis) ossificans progressiva.
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation</b>	1mcg of BMP-2 was lyophilized from a sterile solution containing 0.2% sucrose, 2.5% glycine, 0.01% tween-80, 0.01% NaCl and 3% mannitol.
<b>Biological Activity</b>	The ED <sub>50</sub> as determined by cytolysis of ATDC-5 cell is less than 50ng/ml.
<b>Solubility</b>	It is recommended to reconstitute the lyophilized Bone Morphogenetic Protein-2 in sterile water at a concentration of 100g/ml, which can then be further diluted to other aqueous solutions.

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**Purity** Greater than 95.0% as determined by: (a) Analysis by SEC-HPLC. (b) Analysis by SDS-PAGE.

**Stability** Lyophilized Bone Morphogenetic Protein-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution BMP2 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

## GENE INFORMATION

**Gene Name** [BMP2 bone morphogenetic protein 2 \[ Homo sapiens \]](#)

**Synonyms** BMP2A; BMP-2; Bone morphogenetic protein 2 precursor; bone morphogenetic protein 5; BMP-2A; OTTHUMP00000016650; BMP2

**Gene ID** [650](#)

**mRNA Refseq** [NM\\_001200](#)

**Protein Refseq** [NP\\_001191](#)

**MIM** [112261](#)

**UniProt ID** [P12643](#)

**Chromosome Location** 20p12

**Pathway** BMP signaling pathway; Basal cell carcinoma; Cytokine-cytokine receptor interaction; Hedgehog signaling pathway; TGF-beta signaling pathway

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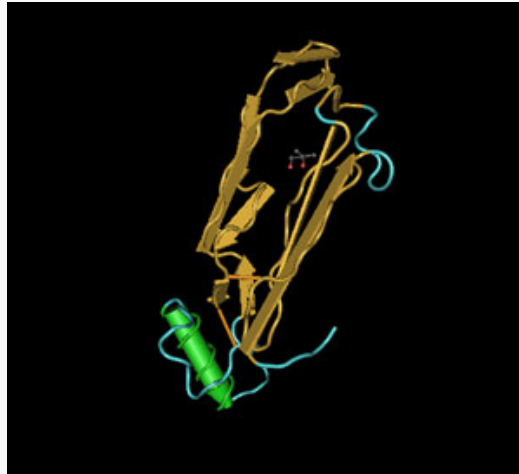
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**Function**

Cytokine activity, Growth factor activity, Specific transcriptional repressor activity

PDB rendering based  
on 3bmp.



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