

BMP4

Recombinant Human Bone Morphogenetic Protein-4

Catalog No.	CRB105A	Quantity:	2 µg
	CRB105B		10 µg
	CRB105C		1.0 mg

Alternate Names: Bone Morphogenetic Protein 4, ZYME, BMP2B, BMP2B1

Description: Recombinant Human Bone Morphogenetic Protein-4 is a monomeric, non-glycosylated, polypeptide chain containing 117 amino acids. Bone Morphogenetic Protein 4 is one of the BMPs, some of which belong to the TGF-beta superfamily (BMP2-7). There are more than thirteen BMPs have been discovered nowadays and they are involved in inducing cartilage and bone formation. BMP-4 is expressed in the lung and lower levels seen in the kidney. It also presents in normal and neoplastic prostate tissues, and prostate cancer cell lines. It regulates the formation of teeth, limbs and one from mesoderm. Furthermore it also plays a role in fracture repair. BMP-4 signals through tetrameric complexes composed of type I and type II receptors and regulates its function by interaction with multiple proteins and glycosaminoglycans. The human BMP-4 shares 98 % sequence identity with mouse BMP-4. Reduced expression of BMP-4 is associated with a number of bone diseases, including the heritable disorder Fibrodysplasia Ossificans Progressiva.

Gene ID: 652

Source: *E. coli*

Molecular Weight: ~13.3 kDa

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in 50 mM Na₂CO₃ + 5 mM DTT, pH 11.0

Purity: >95.0% by HPLC and SDS-PAGE

Endotoxin Level: Less than 1 EU/µg as determined by LAL method.

Amino Acid Sequence: MSPKHHSQRA RKNKNCRRH SLYVDFSDVG WNDWIVAPPG YQAFYCHGDC
PFPLADHLNS TNHAIQTLV NSVNSSIPKA CCVPTELSAI SMLYLDEYDK
VVLKNYQEMV VEGCGCR

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered solutions.

Applications: Molecular standard (Western, ELISA) in studying secreted BMP4.
Preparing antibodies for BMP4 monomer.
Molecule standard in detecting secreted BMP4 in reduced SDS-PAGE.
The optimal concentration should be determined by the user for each specific application.

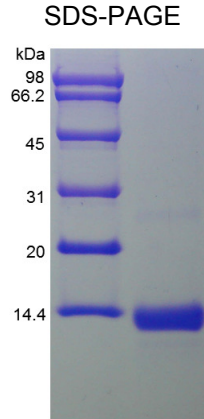
Storage & Stability: This lyophilized preparation is stable at 2-4°C, but should be kept desiccated at -20°C for long term storage. Upon reconstitution, the preparation is stable for up to one week at 2



-4°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. **Avoid repeated freeze/thaw cycles.**

Also Available:

If you need a biologically active form of Recombinant Human BMP4, see Catalog Nos. CRB137A, B & C.



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Cell Sciences®
65 Parker Street
Unit 11
Newburyport, MA 01950

Toll Free: 888-769-1246
Phone: 978-572-1070
Fax: 978-992-0298

E-mail: info@cellsciences.com
Website: www.cellsciences.com