

Bone Morphogenetic Protein-2 Human Recombinant

Item Number	rAP-0372
Synonyms	BMP-2, BMP2A.
Description	Bone Morphogenetic Protein-2 Human Recombinant produced in E.Coli is a homodimeric, non-glycosylated polypeptide chain containing 2x115 amino acids and having a molecular mass of 26kDa. The BMP-2 is purified by proprietary chromatographic techniques.
Uniprot Accession Number	P12643
Amino Acid Sequence	MQAKHKQRKR LKSSCKRHPL YVDFSDVGWN DWIVAPPGYH AFYCHGECPF PLADHLNSTN HAIVQTLVNS VNSKIPKACC VPTELSAISM LYLDENEKVV LKNYQDMVVE GCGCR.
Source	Escherichia Coli.
Physical Appearance and Stability	Sterile Filtered White lyophilized (freeze-dried) powder. 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.
Formulation and Purity	BMP2 was lyophilized from a concentrated (1mg/ml) sterile solution containing 10mM sodium citrate pH=3.5. Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Application	
Solubility	It is recommended to reconstitute the lyophilized Bone Morphogenetic Protein-2 in sterile 20mM AcOH (acetic Acid) not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
Biological Activity	The ED50 as determined by its ability to induce alkaline phosphatase production by ATDC-5 cells is 0.5-1.0 µg/ml.
Shipping Format and Condition	Lyophilized powder at room temperature.

Optimal dilutions should be determined by each laboratory for each application. The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users! This product is sold for **Research Use Only**