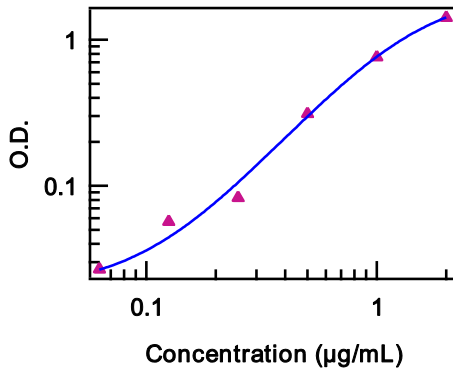


Human BMP-2 Recombinant Protein

Catalog Number: 14-8507

Also known as: Bone Morphogenetic Protein 2

RUO: For Research Use Only. Not for use in diagnostic procedures.



Induction of alkaline phosphatase in C3H/10T1/2 cells by Human BMP-2 Recombinant Protein.

Product Information

Contents: Human BMP-2 Recombinant Protein

REF **Catalog Number:** 14-8507

Concentration: 0.1 mg/mL

Handling Conditions: For best recovery, quick-spin vial prior to opening. Use in a sterile environment

Source: E. coli expressed amino acids Gln283-Arg396 accession number NP_001191

Molecular Mass: 13 kDa

Purity: > 97%, as determined by SDS-PAGE

Endotoxin: Less than 0.01 ng/ug cytokine as determined by the LAL assay.

Bioactivity: The ED₅₀ of this protein, as determined by alkaline phosphatase induction in C3H/10T1/2 cells, is 0.25-1 µg/mL. This corresponds to a specific activity of 4x10³ - 1x10³ Units/mg.

Formulation: Sterile liquid; 0.1 M glycine, 1% BSA



Temperature Limitation: Store at less than or equal to -70°C.



Batch Code: Refer to vial



Use By: Refer to vial

Description

BMP-2 is one of fifteen bone morphogenetic proteins (BMP) belonging to the TGF-β superfamily. The BMPs were first identified as the active factors in demineralized bone matrix, with transcripts later being discovered in many other types of tissue. They are synthesized as large precursor molecules that must be cleaved into their active form and dimerize in order to exhibit functional activity. These dimers may include two identical or distinct BMP chains. BMP responsiveness appears to be limited to multipotent and immature cells. The BMPs are essential for osteogenesis and organogenesis during embryonic development, and also play a role in fracture and wound healing in adults.

Applications Reported

Human BMP-2 Recombinant Protein is biologically active.

Applications Tested

The ED₅₀ of this protein, as determined by alkaline phosphatase induction in C3H/10T1/2 cells, is 0.25-1 µg/mL. This corresponds to a specific activity of 4x10³ - 1x10³ Units/mg.

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References

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Groeneveld EH, Burger EH. Bone morphogenetic proteins in human bone regeneration. *Eur J Endocrinol*. 2000 Jan;142(1):9-21.

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