

ARG70089

Human BMP4 recombinant protein (Active) (His-tagged, C-ter)

Package: 100 µg, 20 µg

Store at: -20°C

Summary

Product Description	E. coli expressed, His-tagged (C-ter) Active Human BMP4 recombinant protein
Tested Application	SDS-PAGE
Target Name	BMP4
Species	Human
A.A. Sequence	Lys303 - Arg408
Expression System	E. coli
Activity	Active
Activity Note	Determined by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED50 for this effect is < 0.58 ng/mL.
Alternate Names	BMP2B; BMP-4; OFC11; Bone morphogenetic protein 2B; BMP2B1; Bone morphogenetic protein 4; MCOPS6; ZYME; BMP-2B

Properties

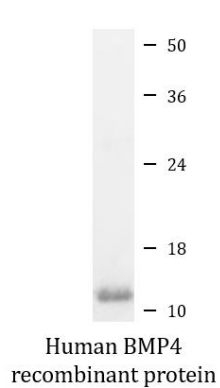
Form	Powder
Purification Note	Endotoxin level is less than 0.1 EU/µg of the protein, as determined by the LAL test.
Purity	> 95% (by SDS-PAGE)
Buffer	20 mM sodium carbonate (pH 9.0)
Reconstitution	It is recommended to reconstitute the lyophilized protein in 4 mM HCl to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	BMP4
Gene Full Name	bone morphogenetic protein 4
Background	The protein encoded by this gene is a member of the bone morphogenetic protein family which is part of the transforming growth factor-beta superfamily. The superfamily includes large families of growth and differentiation factors. Bone morphogenetic proteins were originally identified by an ability of demineralized bone extract to induce endochondral osteogenesis in vivo in an extraskeletal site. This particular family member plays an important role in the onset of endochondral bone formation in humans, and a reduction in expression has been associated with a variety of bone diseases, including the heritable disorder Fibrodysplasia Ossificans Progressiva. Alternative splicing in the 5' untranslated region of this gene has been described and three variants are described, all encoding an identical protein. [provided by RefSeq, Jul 2008]

Function	Induces cartilage and bone formation. Also act in mesoderm induction, tooth development, limb formation and fracture repair. Acts in concert with PTHLH/PTHrP to stimulate ductal outgrowth during embryonic mammary development and to inhibit hair follicle induction (By similarity). [UniProt]
Cellular Localization	Secreted, extracellular space, extracellular matrix. [UniProt]

Images



ARG70089 Human BMP4 recombinant protein (Active) (His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70089 Human BMP4 recombinant protein (Active) (His-tagged, C-ter).