ARG70096
Human BMP10 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 BMP10 recombinant protein
Tested Application	SDS-PAGE
Target Name	BMP10
Species	Human
A.A. Sequence	Asn317 - Arg424
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 1.7-2.1 ng/mL.
Alternate Names	Bone morphogenetic protein 10; BMP-10

Properties

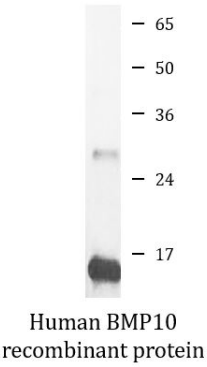
Form	Powder
Purification Note	Endotoxin level is less than 0.1 EU/µg of the protein, as determined by the LAL test.
Purity	> 98% (by SDS-PAGE)
Buffer	20 mM sodium citrate and 0.2 M NaCl (pH 3.5)
Reconstitution	It is recommended to reconstitute the lyophilized protein in 4 mM HCl to a concentration not 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	BMP10
Gene Full Name	bone morphogenetic protein 10
Background	The protein encoded by this gene is a member of the TGF-beta family of growth factors. Data suggest that the similar protein in mouse plays an important role in trabeculation of the embryonic heart. In human, this protein may signal through receptor serine/threonine kinases. [provided by RefSeq, Jul 2008]
Function	Required for maintaining the proliferative activity of embryonic cardiomyocytes by preventing premature activation of the negative cell cycle regulator CDKN1C/p57KIP and maintaining the required expression levels of cardiogenic factors such as MEF2C and NKX2-5. Acts as a ligand for ACVRL1/ALK1, BMPR1A/ALK3 and BMPR1B/ALK6, leading to activation of SMAD1, SMAD5 and SMAD8 transcription factors. Inhibits endothelial cell migration and growth. May reduce cell migration and cell matrix

	adhesion in breast cancer cell lines. [UniProt]
Cellular Localization	Secreted. [UniProt]

Images



ARG70096 Human BMP10 recombinant protein (Active) (His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70096 Human BMP10 recombinant protein (Active) (His-tagged, C-ter).