

Product datasheet

Recombinant human BMP10 protein ab176078

Description

Product name	Recombinant human BMP10 protein
Biological activity	Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells. The expected ED ₅₀ for this effect is 4.0-6.0 ng/ml.
Purity	> 95 % SDS-PAGE.
Endotoxin level	< 0.100 Eu/μg
Expression system	HEK 293 cells
Accession	<u>O95393</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	NAKGN YCKRTP LYDFKEIGWDSW IAPPGYEAYE CRGVCN YPLAEHLTP TKHAIQALVHLKNSQKASKACCVPTKLEPISILYLDKGVVT YKFKEYEGM AVSECGCR
Predicted molecular weight	24 kDa
Amino acids	317 to 424
Additional sequence information	(Homodimeric disulfide-linked protein consisting of two 108 amino acid subunits).

Specifications

Our **Abpromise guarantee** covers the use of **ab176078** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE HPLC Functional Studies
Form	Lyophilized

Preparation and Storage

Stability and Storage

Shipped at 4°C. The lyophilized protein is stable for a few weeks at room temperature. Upon reconstitution add a carrier protein (0.1% BSA). Store at -20°C or -80°C. Avoid freeze / thaw cycle.

Constituent: 0.29% Sodium citrate

This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

General Info

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.

Sequence similarities

Belongs to the TGF-beta family.

Cellular localization

Secreted.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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