Danio rerio (zebrafish) BMP-2 / BMP2A
Protein
Catalog Number: 63003-ZNAE

General Information

Gene Name Synonym:
BMP2

Protein Construction:
A DNA sequence encoding the zebrafish BMP2A (B3DI86) (Gln272-Arg386) was expressed and purified with an initial Met.

Source: Danio rerio (zebrafish)
Expression Host: E. coli

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:
Measured by its ability to induce alkaline phosphatase production by ATDC5 mouse chondrogenic cells. The ED50 for this effect is typically 0.5-3 μg/mL.

Endotoxin:
Please contact us for more information.

Stability:
Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:
The recombinant zebrafish BMP2A consists of 116 amino acids and has a calculated molecular mass of 13.2 kDa. It migrates as an 13 KDa band in SDS-PAGE under reducing conditions.

Formulation:
Lyophilized from sterile 30mM HAC, pH 3.0.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:
Detailed reconstitution instructions are sent along with the products.

Protein Description

BMP-2 protein, like other bone morphogenetic proteins, plays an important role in the development of bone and cartilage. BMP-2 protein is involved in the hedgehog pathway, TGF beta signaling pathway, and cytokine-cytokine receptor interaction. BMP-2 and BMP-7 are osteogenic BMPs that have been demonstrated to potently induce osteoblast differentiation in a variety of cell types. BMP-2, BMP-4 and BMP-7 are known to be of major importance in bone formation and repair. In cancerous tissues BMP-2 protein may play an important role in the progression of glioma.

References