# Human / Mouse / Rat / Rhesus / Canine BMP-2 / BMP2A Protein

Catalog Number: 10426-HNAE



# **General Information**

# Gene Name Synonym:

BDA2: BDA2A: BMP-2: BMP2A

## **Protein Construction:**

A DNA sequence encoding the mature form of human BMP2 (NP\_001191.1) (Gln283-Arg396) was expressed. The mature form sequences of human, mouse, rat, rhesus and canine BMP2 are identical.

Source: Human

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 MC3T3-E1 mouse osteoblastic cells. The ED $_{50}$  for this effect is typically 0.1-0.5µg/mL.

#### **Endotoxin:**

Please contact us for more information.

## Stability:

Samples are stable for up to twelve months from date of receipt at -70  $^{\circ}\mathrm{C}$ 

Predicted N terminal: Met

# **Molecular Mass:**

The recombinant human BMP2 monomer consists of 115 amino acids and has a predicted molecular mass of 13 kDa.

#### Formulation:

Lyophilized from sterile 30 % CAN, 0.1 % TFA, pH 2.9.

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:

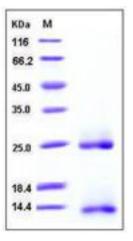
Store it under sterile conditions at  $-20^{\circ}$ C to  $-80^{\circ}$ C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

# Avoid repeated freeze-thaw cycles.

# Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



# **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

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

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