

Mouse BMP-3b / GDF-10 Protein (Fc Tag)

Catalog Number: 50165-M01H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

BMP-3b, GDF-10

Protein Construction:

A DNA sequence encoding the mature form of mouse GDF10 (NP_665684.2) (Gln 367-Arg 476) was fused with the Fc region of human IgG1 at the N-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

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

Predicted N terminal: Glu 20

Molecular Mass:

The recombinant mouse GDF10/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 370 amino acids and has a predicted molecular mass of 40.8 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rmGDF10/Fc monomer is approximately 45 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4

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

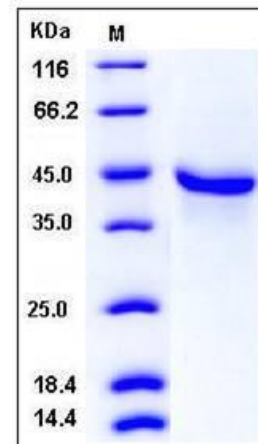
Usage Guide

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.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Bone morphogenetic protein 3B, also known as BMP-3B, Bone-inducing protein, growth/differentiation factor 10 and GDF10, is a secreted protein which belongs to the TGF-beta family. In the mature carboxy-terminal domain GDF10 is more homologous to BMP-3 (83% amino acid sequence identity) than to any other previously identified TGF-beta family member. GDF10 also shows significant homology to BMP-3 (approximately 30% amino acid sequence identity) in the pro- region of the molecule. GDF10 and BMP-3 define a new subgroup within the larger TGF-beta superfamily. In mice, GDF10 mRNA is abundant in the brain, inner ear, uterus, prostate, neural tissues, blood vessels and adipose tissue with low expression in spleen and liver. It is also present in bone of both adults and neonatal mice. Human GDF10 mRNA is found in the cochlea and lung of fetuses, and in testis, retina, pineal gland, and other neural tissues of adults. BMP-3B / GDF10 plays a role in head formation and may have multiple roles in skeletal morphogenesis. It may play multiple roles in regulating cell differentiation events, including those involved in skeletal morphogenesis.

References

1. Cunningham, N.S. et al., 1995, Growth Factors. 12 (2): 99-109.
2. Cagnard, N. et al., 2005, Eur Cytokine Netw. 16 (4): 289-92.
3. Kato, Y. et al., 2006, Int J Mol Med. 17 (5): 951-5.
4. Marsell, R. et al., 2009, Injury. 40 Suppl 3: S4-7.

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

Fax : +86-10-51029969 • Tel: +86-400-890-9989 • <http://www.sinobiological.com>