

Mouse BAMBI / NMA Protein (Fc Tag)

Catalog Number: 50895-M02H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

NMA; 2610003H06Rik

Protein Construction:

A DNA sequence encoding the mouse BAMBI (Q9D0L6) (Met1-Ala152) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 90 % 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 27

Molecular Mass:

The recombinant mouse BAMBI /Fc is a disulfide-linked homodimer. The reduced monomer comprises 367 amino acids and has a predicted molecular mass of 41 kDa. The apparent molecular mass of the protein is approximately 45 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

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:

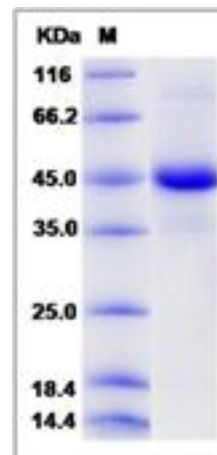
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

BMP and activin membrane-bound inhibitor (BAMBI) is a transmembrane glycoprotein that is a pseudoreceptor of type 1 receptors. BAMBI structurally lacks intracellular serine/ threonine kinase domain but with an extracellular domain and a short cytoplasmic region that share sequence similarities with type 1 receptors, whose members have functions in signal transduction in various developing and pathological processes. BAMBI competes with the type 1 receptor, a receptor of the transforming growth factor-beta (TGF-beta), through functioning as negative regulators of TGF-beta by limiting the signaling range of the TGF-beta family during early embryogenesis. The expression of BAMBI can be induced by accumulated beta-catenin and BMP. The expression level of BAMBI was found aberrantly elevated in most colorectal and hepatocellular carcinomas relative to the corresponding non-cancerous tissues. It suggests that beta-catenin and TGF-beta interfere growth arrest by inducing the expression of BAMBI, and this may contribute to colorectal and hepatocellular tumorigenesis.

References

1. Sekiya T, *et al.* (2003) Identification of BMP and Activin Membrane-bound Inhibitor (BAMBI), an Inhibitor of Transforming Growth Factor-Signaling, as a Target of the -Catenin Pathway in Colorectal Tumor Cells. *The Journal of Biological Chemistry*. 279:6840-6.
2. Shi YG, *et al.* (2003) Mechanisms of TGF- Signaling from Cell Membrane to the Nucleus. *Cell*. 113(6): 685-700.
3. Wanninger J, *et al.* (2011) Adiponectin induces the transforming growth factor decoy receptor BAMBI in human hepatocytes. *FEBS Lett*. 585(9):1338-44.

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>