Mouse BAMBI / NMA Protein (His Tag)

Catalog Number: **50895-M08H**

General Information

Gene Name Synonym:

2610003H06Rik

Protein Construction:

A DNA sequence encoding the extracellular domain of mouse BAMBI (Q9D0L6) (Met 1-Ala 152) was expressed, with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: HEK293 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 ℃

Predicted N terminal: Glu 27

Molecular Mass:

The secreted recombinant mouse BAMBI comprises 137 amino acids and has a calculated molecular mass of 15.4 kDa. As a result of glycosylation, the apparent molecular mass of rmBAMBI is approximately 20-25 kDa in SDS-PAGE under reducing conditions.

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:

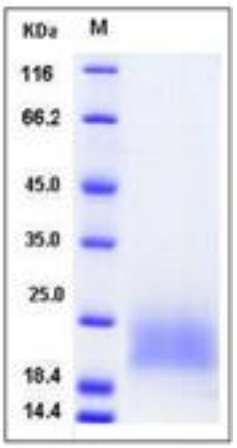
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 suggestes 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.