



# Recombinant Protein Technical Manual

## Recombinant Mouse BAMBI Protein (Fc Tag)

RPES1410

### Product Data:

**Product SKU:** RPES1410

**Size:** 20µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** Q9D0L6

### Protein Information:

**Molecular Mass:** 41 kDa

**AP Molecular Mass:** 45 kDa

**Tag:** C-Fc

**Bio-activity:**

**Purity:** > 90 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** 2610003H06Rik

## Immunogen Information:

**Sequence:** Met1-Ala152

## Background:

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.