

# Recombinant Protein Technical Manual Recombinant Mouse TETHERIN/BST2 Protein (Fc Tag) RPES0992

### **Product Data:**

Product SKU: RPES0992 Size: 20μg

Species: Mouse Expression host: HEK293 Cells

Uniprot: Q8R2Q8

## **Protein Information:**

Molecular Mass: 40 kDa

AP Molecular Mass: 4-50 kDa

Tag: N-Fc

**Bio-activity:** 

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

**Endotoxin:**  $< 1.0 \text{ EU per } \mu \text{g}$  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:** 2310015I10Rik;Bst-2;C87040;CD317;DAMP;GREG

# Immunogen Information:

Sequence: Thr 52-Asn 151

# **Background**:

BST2 was frequently overexpressed in GC tissues compared with the adjacent non-tumorous tissues, and high BST2 expression was correlated with tumor stage and lymphatic metastasis. Furthermore, in vitro experiments demonstrated that knockdown of BST2 by siRNA inhibited cell proliferation, induced apoptosis and repressed cell motility in GC cells. In addition, the pro-tumor function of BST2 in GC was mediated partly through the NF-kB signaling. BST2 possesses the oncogenic potential in GC by regulating the proliferation, apoptosis, and migratory ability of GC cells, thereby BST2 could be a potential therapeutic target for the treatment of GC. IFN (interferon)-induced BST2 recruits the E3 ubiquitin ligase MARCH8 to catalyze the K27-linked ubiquitination of MAVS for CALCOCO2-directed autophagic degradation, hence inhibiting DDX58-mediated type I interferon signaling through a negative feedback loop. BST2 is a host protein with dual functions in response to viral infections: it traps newly assembled enveloped virions at the plasma membrane in infected cells, and it induces NF-kB activity, especially in the context of retroviral assembly. BST2 may induce or amplify proinflammatory signaling during Ebola virus infection, potentially contributing to the dysregulated cytokine response that is a hallmark of Ebola virus disease.