

# Rat CD157 / BST1 Protein (Fc Tag)

Catalog Number: 80351-R02H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

BST1

### Protein Construction:

A DNA sequence encoding the rat BST1 (Q63072) (Met1-Glu293) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

**Source:** Rat

**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 °C

**Predicted N terminal:** Ala 28

### Molecular Mass:

The recombinant rat BST1/Fc is a disulfide-linked homodimer. The reduced monomer comprises 506 amino acids and has a predicted molecular mass of 56.8 kDa. The apparent molecular mass of the protein is approximately 67 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:

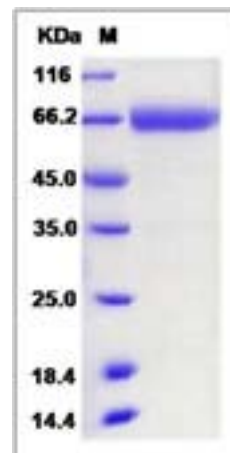
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD157, also known as ADP-ribosyl cyclase 2, is an ectoenzyme sharing several characteristics with ADP-ribosyl cyclase CD38. CD157 was originally identified as a bone marrow stromal cell molecule (BST-1) with a glycosylphosphatidylinositol (GPI) anchor to bind to the cell surface. CD157 is prevalently expressed by cells of the myeloid lineage. CD157 could act as a receptor with signal transduction capability. Further, it regulates calcium homeostasis and promotes polarization in neutrophils and mediates superoxide (O<sub>2</sub><sup>-</sup>) production in the human U937 myeloid line.

## References

- 1.Zola H, *et al.* (2007) CD molecules 2006-human cell differentiation molecules. J Immunol Methods. 318 (1-2): 1-5.
- 2.Ho IC, *et al.* (2009) GATA3 and the T-cell lineage: essential functions before and after T-helper-2-cell differentiation. Nat Rev Immunol. 9 (2): 125-35.
- 3.Matesanz-Isabel J, *et al.* (2011) New B-cell CD molecules. Immunology Letters.134 (2): 104-12.

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