

## Recombinant Mouse CD157/BST1 Protein (His Tag)

Catalog No. PKSM040738

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

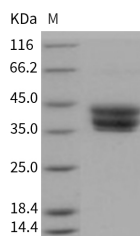
### Description

|                                    |  |
|------------------------------------|--|
| <b>Synonyms</b>                    | ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 2;ADP-ribosyl cyclase 2;Antigen BP3;BP-3 alloantigen;Bone marrow stromal antigen 1;BST-1;Cyclic ADP-ribose hydrolase 2;cADPr hydrolase 2;Leukocyte antigen 65;Ly-65;CD157;Bst1;Bp-3;Bp3;Ly65 |
| <b>Species</b>                     | Mouse  |
| <b>Expression Host</b>             | HEK293 Cells   |
| <b>Sequence</b>                    | Met 1-Glu 285  |
| <b>Accession</b>                   | NP_033893.2  |
| <b>Calculated Molecular Weight</b> | 30.9 kDa   |
| <b>Observed molecular weight</b>   | 37&40&44 kDa   |
| <b>Tag</b>                         | C-His  |
| <b>Bioactivity</b>                 | Not validated for activity   |

### Properties

|                       |   |
|-----------------------|---|
| <b>Purity</b>         | > 97 % as determined by reducing SDS-PAGE.  |
| <b>Endotoxin</b>      | < 1.0 EU per µg of the protein as determined by the LAL method.   |
| <b>Storage</b>        | Generally, 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. |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.   |
| <b>Formulation</b>    | Lyophilized from sterile PBS, pH 7.4<br>Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual.            |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.  |

### Data



> 97 % as determined by reducing SDS-PAGE.

### For Research Use Only

## Background

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.

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