

Recombinant Protein Technical Manual Recombinant Mouse CD157/BST1 Protein (His Tag)

RPES2885

Product Data:

Product SKU: RPES2885 **Size:** 50μg

Species: Mouse Expression host: HEK293 Cells

Uniprot: NP 033893.2

Protein Information:

Molecular Mass: 30.9 kDa

AP Molecular Mass: 37, 40 & 44 kDa

Tag: C-His

Bio-activity:

Purity: > 97 % 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: ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 2; ADP-ribosyl cyclase 2; Antigen

BP3; BP-3 alloantigen; Bone marrow stromal antigen 1; BST; Cyclic ADP-ribose hydrolase 2; cADPr hydrolase 2; Leukocyte antigen 65; Ly-65; CD157; Bst1; Bp-3;

Bp3; Ly65

Immunogen Information:

Sequence: Met 1-Glu 285

Background:

The cluster of differentiation (CD) system is commonly used as cell markers in immunophynotyping. 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) 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 (O2–) production in the human U937 myeloid line.