



Recombinant Protein Technical Manual
Recombinant Mouse CD157/BST1 Protein (His Tag)
RPES2260

Product Data:

Product SKU: RPES2260

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: Q64277

Protein Information:

Molecular Mass: 30.3 kDa

AP Molecular Mass: 35-45 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

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

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 a 0.2 µm filtered solution of PBS, pH7.4.

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: Ala25-Glu285

Background:

CD157 is a glycosyl phosphatidylinositol anchored membrane protein that belongs to the CD38 family. CD157 was discovered in a bone marrow stromal cell line where it facilitates preBcell growth. Along with CD38, CD157 is a bifunctional ectoenzyme that exhibits both ADP-ribosyl cyclase and cyclic ADP ribose hydrolase activities. It may play a role in rheumatoid arthritis (RA) due to its enhanced expression in RA-derived bone marrow stromal cell lines. CD157 has been predicted to function as a cell surface receptor and an immunoregulatory molecule. 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.