



Recombinant Protein Technical Manual

Recombinant Human IL1R2/CD121b Protein (His Tag)(Active)
RPES1954

Product Data:

Product SKU: RPES1954

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_004624.1

Protein Information:

Molecular Mass: 39.3 kDa

AP Molecular Mass: 50-55 kDa

Tag: C-His

Bio-activity: Measured by its ability to inhibit IL1β-dependent proliferation in D10. G4.1 mouse helper T cells. The ED50 for this effect is typically 5.5 µg/mL in the presence of 40 pg/mL of rhIL1β.2. Measured by its ability to inhibit Interferon gamma secretion by human natural killer lymphoma NK-92 cells in the presence of 500pg/mL IL1b. The EC50 for this effect is typically 20-80ng/mL.

Purity: > 98 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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: CD121b;CDw121b;ILR-2;ILRT-2;ILRT2;IL1R2c;IL1RB;Interleukin receptor type 2; ILR-2; CD121 antigen-like family member B; CDw121b; IL type II receptor; Interleukin receptor beta; ILR-beta; Interleukin receptor type I

Immunogen Information:

Sequence: Met 1-Glu 343

Background:

Interleukin 1 receptor, type II (IL1R2) also known as CD121b (Cluster of Differentiation 121b) is a cytokine receptor that belongs to the interleukin receptor family. This protein binds interleukin alpha (IL1A), interleukin beta (IL1B), and interleukin 1 receptor, type I (IL1R1/IL1RA), and acts as a decoy receptor that inhibits the activity of its ligands. The pleiotropic cytokine IL1 is produced to regulate development and maintenance of the inflammatory responses, and binds to specific plasma membrane receptors on cells. Two distinct types of IL1 receptors which are able to bind IL1 specifically have been identified, designated as IL1RI (IL1RA) and IL1RII (IL1RB). IL1R1 contributes to IL signaling, whereas the ILR2/CD121b has no signaling property and acts as a decoy for IL. ILR2/CD121b structurally consisting of a ligand binding portion comprised of three Ig-like domains, a single transmembrane region, and a short cytoplasmic domain, is expressed in a variety of cell types including B lymphocytes, neutrophils, monocytes, large granular leukocytes and endothelial cells. Interleukin 4 (IL4) is reported to antagonize the activity of interleukin 1 by inducing the expression and release of this cytokine.