# Recombinant Protein Technical Manual

## Recombinant Human IL1R2/CD121b Protein (His Tag)

**RPES4581**

## Product Data:

**Product SKU:** RPES4581

**Size:** 10µg

**Species**: Human

**Expression host:** Human Cells

**Uniprot:** NP_004624.1

## Protein Information:

**Molecular Mass:** 38.6 kDa

**AP Molecular Mass:** 50 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95 % 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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:** 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:** Phe14-Glu343

## Background:

Interleukin receptor type 2 (IL1R2) belongs to the interleukin receptor family. Two distinct types of IL1 receptors which are able to bind IL1 specifically have been identified, designated as IL1RI (IL1RA) and IL1RII (IL1RB). IL1 receptor type II is a 68 kDa transmembrane protein found on B lymphocytes, neutrophils, monocytes, large granular leukocytes and endothelial cells. IL1R2 is non-signaling receptor forIL1A, IL1B and IL1RN, reduces IL1B activities. IL1R2 serves as a decoy receptor by competetive binding to IL1B and preventing its binding to IL1R1. IL1R2 modulates cellular response through non-signaling association with IL1RAP after binding to IL1B. IL1R2 (membrane and secreted forms) preferentially binds IL1B and poorly IL1A and IL1RN. The secreted IL1R2 recruits secreted IL1RAP with high affinity; this complex formation may be the dominant mechanism for neutralization of IL1B by secreted/soluble receptors.