



# Recombinant Protein Technical Manual

## Recombinant Mouse IL1R1/CD121a Protein (His Tag)

RPES1533

### Product Data:

**Product SKU:** RPES1533

**Size:** 10µg

**Species:** Mouse

**Expression host:** Human Cells

**Uniprot:** P13504

### Protein Information:

**Molecular Mass:** 38.1 kDa

**AP Molecular Mass:** 50-90 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, pH 7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Interleukin receptor type 1; ILRT1; IL RI; CD121b; ILR1; IL-iR; IL1r

## Immunogen Information:

**Sequence:** Leu20-Lys338

## Background:

Mouse Interleukin 1 receptor, type I (ILR1) also known as CD121a (Cluster of Differentiation 121a), is an interleukin receptor. ILR1/CD121a is a cytokine receptor that belongs to the interleukin 1 receptor family. This protein is a receptor for interleukin 1 alpha (IL1A), interleukin 1 beta (IL1B), and interleukin 1 receptor antagonist (IL1RA). It is an important mediator involved in many cytokine induced immune and inflammatory responses. An IL1 receptor accessory protein that can heterodimerize with the Type I receptor in the presence of IL1 $\alpha$  or IL1 $\beta$  but not IL1ra, was identified. This Type I receptor complex appears to mediate all the known IL1 biological responses. The receptor Type II has a short cytoplasmic domain and does not transduce IL1 signals. In addition to the membranebound form of IL1 RII, a naturally occurring soluble form of IL1 RII has been described. It has been suggested that the Type II receptor, either as the membranebound or as the soluble form, serves as a decoy for IL1 and inhibits IL1 action by blocking the binding of IL1 to the signaling Type I receptor complex.