# Recombinant Rat IL-1 RI Protein (Fc Tag)



## **RPES8537**

# **Product Information**

Product SKU: RPES8537 Expression Host: Mammalian Size: 20μg

Tag: C-Fc Reactivity: Rat Accession: Q02955

### **Additional Information**

Calculated MW: 59.9 kDa Observed MW: 80 kDa

**Sequence**: Leu20-Lys338

#### **Protein Information**

Background:

Interleukin 1 receptor, type I (IL-1R1) also known as CD121a (Cluster of Differentiation 121a), is an interleukin receptor. IL-1R1/CD121a is a cytokine receptor that belongs to the interleukin 1 receptor family. This protein is a receptor for interleukin alpha (IL-1α/IL-1F1), interleukin beta (IL1B), and interleukin 1 receptor, type I (IL1R1/IL1RA). IL-1R1/CD121a is an important mediator involved in many cytokines induced immune and inflammatory responses. This protein has been characterized by pharmacological and molecular techniques in the mouse brain. The spindle-shaped astrocytes enclose the wound, separating the healthy from damaged neural tissue. The shape change and subsequent repair processes are IL-1\beta activity-dependent, acting through the IL-1 type 1 receptor (IL-1R1), as co-application of the IL-1type 1 receptor antagonist protein (IL-1ra) blocks IL-1β induced effects. In the spleen, a slight increase in IL-1R ACP and IL-1R1 was observed during the first hours following LPS stimulation. In conclusion, IL-1R AcP mRNA is expressed in the brain and in other tissues where IL-1R1/CD121a transcripts are found. However, the regulation of its expression is distinct from IL-1R1/CD121a. The high level of expression and the lack of regulation of IL-1R AcP transcripts in the brain under inflammatory conditions suggest that the protein might be constitutively expressed in excess.

**Synonyms**: D2S, IL1-R, CD121a, D2S1473, IL1R, IL1-R1, IL-1R-alpha, P80, Il1ra, Il1r1

**Endotoxin**: < 1.0 EU/mg of the protein as determined by the LAL method

**Formulation**: Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.

**Purity**: > 90% as determined by reducing SDS-PAGE.

**Bio-Activity**: Not validated for activity

**Storage**: Generally, 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.