

# Recombinant Human IL-1R3/IL-1RAcP/IL1RAP Protein

Catalog No.: RP01382 Recombinant

### **Sequence Information**

Species Gene ID Swiss Prot Human 3556 09NPH3-1

**Tags** C-hFc

Synonyms

IL1RAP;C3orf13;IL-1RAcP;IL1R3

### **Product Information**

**Source** Purification HEK293 cells ≥ 90 % as

≥ 90 % as determined by SDS-PAGE;≥ 90 % as determined by HPLC.

Calculated MW Observed MW

65.07 kDa 90-100 kDa

**Endotoxin** 

< 0.1 EU/ $\mu$ g of the protein by LAL method.

#### **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

### Reconstitution

Centrifuge the vial before opening.
Reconstitute to a concentration of
0.1-0.5 mg/mL in sterile distilled water.
Avoid vortex or vigorously pipetting the
protein. For long term storage, it is
recommended to add a carrier protein or
stablizer (e.g. 0.1% BSA, 5% HSA, 10%
FBS or 5% Trehalose), and aliquot the
reconstituted protein solution to
minimize free-thaw cycles.

#### Contact

### **Background**

Interleukin-1 receptor accessory protein (IL-1RAcP) also known as Interleukin-1 receptor member 3 (IL-1R3) is a cytokine receptor that binds interleukin 1. The IL-1 receptor accessory protein (IL1RAP) is a transmembrane protein that interacts with IL-1R and is required for IL-1 signal transduction. Interleukin 1 induces the synthesis of the acute phase and proinflammatory proteins during infection, tissue damage, or stress, by forming a complex at the cell membrane with an interleukin 1 receptor and an accessory protein. IL-1RAcP/IL-1R3 is a necessary part of the interleukin 1 receptor complex which initiates signaling events that result in the activation of interleukin 1responsive genes. Alternative splicing of this gene results in two transcript variants encoding two different isoforms, one membrane-bound and one soluble. The ratio of soluble to membrane-bound forms increases during acute-phase induction or stress. IL-1RAcP/IL-1R3 mediates interleukin-1-dependent activation of NF-kappa-B. Isoform 1 is part of the membrane-bound form of the IL-1 receptor. Signaling involves the formation of a ternary complex containing IL1R1, TOLLIP, MYD88, and IRAK1 or IRAK2. Isoform 2 modulates the response to interleukins by associating with soluble IL1R1 and enhancing interleukin-binding to the decoy receptor.

### **Basic Information**

#### **Description**

Recombinant Human IL-1R3/IL-1RACP/IL1RAP Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ser21-Glu359) of human IL1RAP/IL1R3 (Accession #NP\_002173.1) fused with a hFc tag at the C-terminus.

### **Bio-Activity**

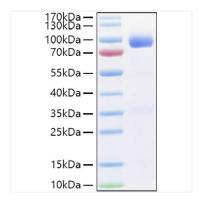
#### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

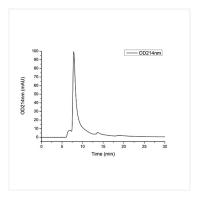
After reconstitution, the protein solution is stable at -20  $^{\circ}$ C for 3 months, at 2-8  $^{\circ}$ C for up to 1 week.

Avoid repeated freeze/thaw cycles.

## **Validation Data**



Recombinant Human IL-1R3/IL-1RAcP/IL1RAP Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



The purity of Human IL1RAP/IL1R3 Protein (Cat.RP01382) was greater than 90% as determined by SEC-HPLC.