

# Human IL-1R1 Protein

Cat. No. IL1-HM1R1

## Description

<b>Source</b>	Recombinant Human IL-1R1 Protein is expressed from Expi293 with His tag at the C-terminal. It contains Leu18-Thr332.
<b>Accession</b>	NP_000868.1
<b>Molecular Weight</b>	The protein has a predicted MW of 37 kDa. Due to glycosylation, the protein migrates to 55-68 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 5% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge tubes before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please avoid freeze-thaw cycles.

## Background

Interleukin 1 (IL-1) has long been known for its pleiotropic effects on inflammation that plays a complex, and sometimes contrasting, role in different stages of cancer development. IL-1R1 is the main receptor for both ligands and is expressed by various cell types, including innate and adaptive immune cell types, epithelial cells, endothelial cells, adipocytes, chondrocytes, fibroblasts, etc. IL-1 and IL-1R1 receptor interaction leads to a set of common signaling pathways, mainly the NF- $\kappa\text{B}$  and MAP kinase pathways, as a result of complex positive and negative regulations.

## Assay Data

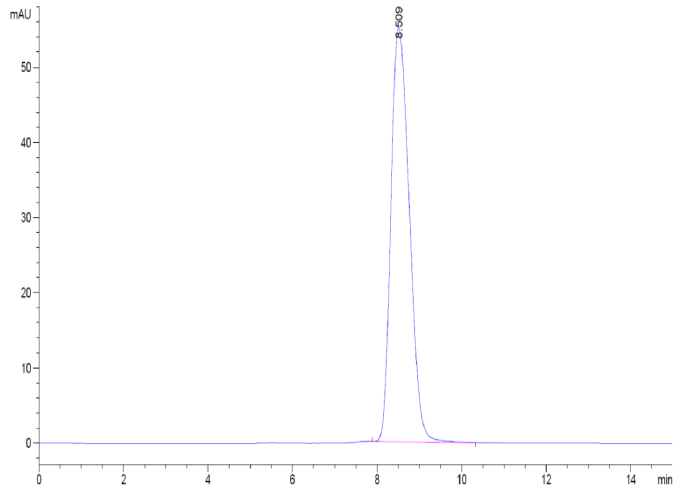
### Tris-Bis PAGE



Human IL-1R1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data



The purity of Human IL-1R1 is greater than 95% as determined by SEC-HPLC.