

Rat IL-1RA / IL1RN Protein (Fc Tag)

Catalog Number: 80073-R01H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

IL1RN, IL-1ra

Protein Construction:

A DNA sequence encoding the rat IL1RN (P25086) (His27-Gln178) was expressed, fused with Fc region of human IgG1 at the N-terminus.

Source: Rat

Expression Host: Human Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Bio-Activity

Immobilized rat IL1R1-His (Cat:80028-R08H) at 10 µg/ml (100 µl/well) can bind rat Fc-IL1RN, The EC50 of rat Fc-IL1RN is 5.1-11.9 ng/ml.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Glu

Molecular Mass:

The recombinant rat IL1RN comprises 412 amino acids and predicts a molecular mass of 45.8 kDa. The apparent molecular mass of the recombinant protein is approximately 47 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

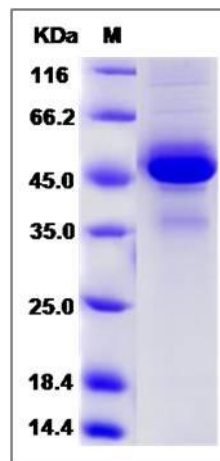
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

IL1 is an important prototypic pro-inflammatory cytokine that affects multiple cell types, often in concert with another cytokine, tumor necrosis factor (TNF). There are two forms of IL1, IL1 α and IL1 β , whose function are mediated by the two specific receptors on the cell surfaces. The IL1 receptor antagonist (IL1RA), formerly called the IL1 inhibitor, is a member of the IL1 cytokine family which binds to the same receptor (IL1R) as IL1, and thus prevents IL1 from signal transduction without interaction with the IL1 molecules. In terms of protein similarities, IL1RA is more closely related to IL1 β than it is to IL1 α . IL1RA modulates a variety of IL1-related immune and inflammatory responses, and accordingly, the balance between IL1 and IL1Ra in local tissues plays an important role in the susceptibility to and severity of many diseases. IL1RA is suggested to have possible therapeutic applications in treatment of sepsis, rheumatoid arthritis, and chronic myelogenous leukemia. Four alternatively spliced transcript variants encoding distinct isoforms have been identified, and the isoform 1 of IL1RA is secreted from monocytes, macrophages, neutrophils, and other cells.

References

1. Haskill S. et al., 1991, Proc Natl Acad Sci. 88: 3681-5.
2. Sehouli J. et al., 2002, Anticancer Res. 22: 3421-4.
3. Arend WP. et al., 1998, Annu Rev Immunol. 16: 27-55.
4. Dinarello CA. et al., 1997, Cytokine Growth Factor Rev. 8: 253-65.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>