

## Recombinant Human, IL1RA / Interleukin-1 receptor antagonist, Animal Free & Carrier Free

Cat #: C-CYP106

Size: 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

### Product Overview

The interleukin-1 receptor antagonist (IL-1RA) is a protein that in humans is encoded by the IL1RN gene. IL-1RA was initially called the IL-1 inhibitor and was discovered separately in 1984 by two independent laboratories. IL-1RA is an agent that binds non-productively to the cell surface interleukin-1 receptor (IL-1R), the same receptor that binds interleukin 1 (IL-1), preventing IL-1 from sending a signal to that cell.

### Product Information

**Source:** *Escherichia Coli*.

**Purity:** >98% as determined by SDS-PAGE. Ni-NTA chromatography.

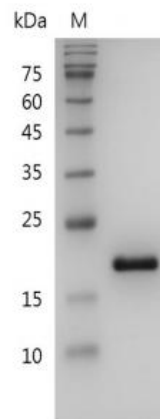
**Biological Activity:** Measure by its ability to inhibit IL-1 alpha - dependent proliferation in D10.G4.1 cells. The ED<sub>50</sub> for this effect is < 50 ng/mL.

**Endotoxin:** <0.1EU per 1µg of the protein by the LAL method.

**Amino acid sequence:**

MRPSGRKSSKMQAFRIWDVFNQKTFYLRNNQLVAGYLQGPVNVLEEKIDVVPIEPHALFLGIHGGKMCLSCVKSGDETRLQLEAVNITDLS  
ENRKQDKRFAFIRSDSGPTTSFESAACPGWFLCTAMEADQPVSLTNMPDEGVMVTKFYFQEDE with polyhistidine tag at the C-terminus

**Formulation:** Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 7.4.



SDS-PAGE analysis of recombinant human IL-1 RA

## Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H<sub>2</sub>O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

## Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

## Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.