

**IL-1 RA**  
**Catalog # PVGS1351**

**Specification**

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**IL-1 RA - Product Information**

Primary Accession [P18510](#)  
**Species**  
Human

**Sequence**  
Arg26-Glu177

**Purity**  
> 95% as analyzed by SDS-PAGE  
> 95% as analyzed by HPLC

**Endotoxin Level**  
< 0.2 EU/ µg of protein by gel clotting method

**Biological Activity**  
ED<sub>50</sub> < 0.1 µg /ml, measured in a neutralization assay using D10S cells in the presence of 50.0 pg/ml Human IL-1a.

**Expression System**  
HEK 293

Formulation **Lyophilized after extensive dialysis against PBS.**

**Reconstitution**  
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH<sub>2</sub>O or PBS up to 100 µg/ml.

**Storage & Stability**  
Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

**IL-1 RA - Additional Information**

**Gene ID** 3557

**Other Names**  
Interleukin-1 receptor antagonist protein, IL-1RN, IL-1ra, IRAP, ICIL-1RA, IL1 inhibitor, Anakinra, IL1RN, IL1F3, IL1RA

**Target Background**  
IL-1 Receptor Antagonist, also known as IL-1RA, ICIL-1RA, IRAP and IL-1RN, is a member of the interleukin 1 cytokine family. It is expressed by monocytes, neutrophils, macrophages, epithelial cells and fibroblasts. IL-1RA inhibits the activity of both IL-1α and IL-1β, and modulates a

variety of IL-1 related immune and inflammatory responses. It inhibits the activity of IL-1 by binding to the receptor IL-1R1 and preventing its association with the coreceptor IL-1RAP for signaling. Clinical studies are being conducted to investigate the use of IL-1RA in the treatment of sepsis, rheumatoid arthritis and chronic myelogenous leukemia.

## **IL-1 RA - Protein Information**

**Name** IL1RN

**Synonyms** IL1F3, IL1RA

### **Function**

Anti-inflammatory antagonist of interleukin-1 family of proinflammatory cytokines such as interleukin-1beta/IL1B and interleukin-1alpha/IL1A. Protects from immune dysregulation and uncontrolled systemic inflammation triggered by IL1 for a range of innate stimulatory agents such as pathogens.

### **Cellular Location**

[Isoform 1]: Secreted [Isoform 3]: Cytoplasm.

### **Tissue Location**

The intracellular form of IL1RN is predominantly expressed in epithelial cells

## **IL-1 RA - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **IL-1 RA - Images**