

IL-1 RA

Catalog # PVGS1351

### Specification

# IL-1 RA - Product Information

Primary Accession Species Human

## <u>P18510</u>

Sequence Arg26-Glu177

Purity > 95% as analyzed by SDS-PAGE<br>> 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  $\mu$ g /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  $ddH_2O$  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-1alpha and IL-1beta, 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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

IL-1 RA - Images