

## Recombinant Human IL-1RA

Catalog No: C033

Description Recombinant Human Interleukin-1 Receptor Antagonist Protein is produced by our E.coli expression

system and the target gene encoding Arg26-Glu177 is expressed.

Source E. coli

Alternative name Interleukin-1 Receptor Antagonist Protein; IL-1RN; IL-1ra; IRAP; ICIL-1RA; IL1 Inhibitor; Anakinra;

IL1RN; IL1F3; IL1RA

Accession No. P18510

Formulation Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

Quality Control Bioactivity\* Measured by the dose-dependent inhibition of IL-1 stimulation of D10S cells.

ED50 is 0.5 ng/ml. Specific Activity of 2.0 x 10 $^{6}$  IU/mg.

Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/ $\mu$ g (1 IEU/ $\mu$ g).

**Shipping** The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Amino Acid Sequence  ${\sf MRPSGRKSSKMQAFRIWDVNQKTFYLRNNQLVAGYLQGPNVNLEEKIDVVPIEPHALFLGIHGGKM}$ 

CLSCVKSGDETRLQLEA

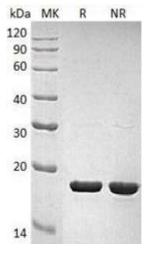
VNITDLSENRKQDKRFAFIRSDSGPTTSFESAACPGWFLCTAMEADQPVSLTNMPDEGVMVTKFYF

**QEDE** 

**Background** 

Interleukin-1 Receptor Antagonist (IL-1RN) is a member of the IL-1 family. Endogenous IL-1RN is produced in numerous animal disease models as well as in human autoimmune and chronic inflammatory diseases. It binds to IL-1 receptors in competition with IL-1, but does not elicit intracellular response from this binding. Its role in counteracting the proinflammatory effects of IL-1 is being studied by numerous research groups. IL-4 and IL-13 have been shown to amplify the stimulatory effect of IL1-beta on the production of soluble and intracellular forms of IL-1RN. The regulated expression of IL-1RN in various cell types has been shown to be influenced by cytokines. In synovial fibroblasts, IL-1, TNF-alpha, or PDGF markedly enhances the synthesis of IL-1RN.

## **SDS-PAGE**



MK: Marker

R: Sample in reducing conditions

NR: Sample in non-reducing conditions

