



## Product Datasheet

<b>Product Name</b>	Recombinant Human Interleukin-1 Receptor Antagonist
<b>Cata No</b>	CB500105
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	IRAP, IL1F3, IL1RA, IL-1ra3, ICIL-1RA, IL1RN, IL1 inhibitor, IL-1ra, MGC10430.

### Description

Interleukin-1 ra is a member of the interleukin 1 cytokine family. This protein inhibits the activities of interleukin 1, alpha (IL1A) and interleukin 1, beta (IL1B), and modulates a variety of interleukin 1 related immune and inflammatory responses. This gene and five other closely related cytokine genes form a gene cluster spanning approximately 400 kb on chromosome 2. A polymorphism of this gene is reported to be associated with increased risk of osteoporotic fractures and gastric cancer. Four alternatively spliced transcript variants encoding distinct isoforms have been reported.

IL1ra Human Recombinant produced in E.Coli is a non-glycosylated, N-terminal methionyl form of the human naturally-occurring polypeptide chain containing 153 amino acids and having a molecular mass of 17000 Dalton.

The IL1ra is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Biological Activity

The ED50 as determined by the dose-dependant inhibition of IL-1 stimulation of D10S cells was found to be 0.5 ng/ml.

### Purity

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

### Formulation

Lyophilized protein with no additives.

### Reconstitution

It is recommended to reconstitute the lyophilized Interleukin-1 18MΩ-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized Interleukin 1ra although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL-1ra should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**

### Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Arg-Pro-Ser-Gly.

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