IL1RN
Recombinant Human Interleukin-1 Receptor Antagonist

Catalog No.	CRI134A	**Quantity:**	20 µg
	CRI134B		100 µg
	CRI134C		1.0 mg

Alternate Names: ICIL-1RA, IL1 inhibitor, IL1F3, IRAP, IL-1 RA

Description: Recombinant Human IL1RN is a single non-glycosylated polypeptide chain containing 152 amino acids.
Background: Interleukin-1 receptor antagonist (IL-1ra) is a member of the IL-1 family. Endogenous IL-1ra 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 IL1-ra. The regulated expression of IL -1ra in various cell types has been shown to be influenced by cytokines. In synovial fibroblasts the synthesis of IL-1ra is markedly enhanced by IL-1, TNF-alpha, or PDGF.

GeneID: 3557

Source: *E. coli*

Molecular Weight: 17.1 kDa

Formulation: Lyophilized from a sterile filtered solution in PBS, pH 7.4

Purity: >96% by HPLC and SDS-PAGE

Endotoxin Level: Less than 1 EU/µg of rHuIL-1RA as determined by LAL method.

Biological Activity: Fully biologically active when compared to standard. The ED_{50} as determined by inhibiting IL-1α-dependent proliferation of murine D10S cells is less than 40 ng/ml, corresponding to a specific activity of > 2.5×10^4 IU/mg in the presence of 50 pg/ml rHuIL -1α.

Specific Activity: > 2.5×10^4 IU/mg

Amino Acid Sequence: RPSGRKSSKM QAFRIWDVNQ KTFYLRNNQL VAGYLQGPNV NLEEKIDVVP IEPHALFLGI HGGKMCLSCV KSGDETRLQL EAVNITDLSE NRKQDKRFAF IRSDSGPTTS FESAACPGWF LCTAMEADQP VSLTNMPDEG VMVTKFYFQE DE

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered solutions.

Storage & Stability: The lyophilized protein is stable at 2-8°C. Upon receipt, store desiccated at -20°C. After reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. For long term storage of reconstituted protein, it is recommended that a carrier

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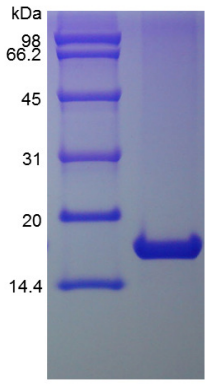
protein such as 0.1% BSA or HSA be added. This depends on the particular application.
Avoid repeated freeze/thaw cycles.

SDS-PAGE



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