

Rev03
Update: Dec,14,2021

DATASHEET

IL-1RA, Human

Cat. No.: Z00367

Product Introduction

Species	Human
Protein Construction	IL-1RA (Arg26-Glu177) Accession # P18510-1
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 1 EU/μg of protein by LAL method
Biological Activity	Measured by its ability to inhibit IL-1 beta induced NF-κB signaling in 293-IL1 Res cells. The ED ₅₀ for this effect is 13.2 ng/mL.
Expression System	E. coli
Theoretical Molecular Weight	17.3 kDa
N-terminal Sequence Analysis	The sequence of the first five N-terminal amino acids was determined and found to be Met-Arg-Pro-Ser-Gly.
Apparent Molecular Weight	~18 kDa, on SDS-PAGE under non-reducing conditions.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
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 distilled water up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Background

Target 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 IL1ra 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.

Synonyms : IL-1ra; IL1 Receptor Antagonist; Interleukin-1 Receptor Antagonist; Interleukin1 Receptor Antagonist

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.