

Rev03 Update: Dec,14,2021

DATASHEET

IL-1RA, Human

Cat. No.: Z02700

Product Introduction

Species	Human
Protein Construction	IL-1RA (Arg26-Glu177) Accession # P18510
Purity	> 96% as analyzed by SDS-PAGE > 96% as analyzed by HPLC
Endotoxin Level	< 1 EU/µg of protein by LAL method
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by inhibiting IL-1 α -dependent proliferation of murine D10S cells is less than 40.0 ng/ml, corresponding to a specific activity of > 2.5 × 10 ⁴ IU/mg in the presence of 50.0 pg/ml rHuIL-1 α .
Expression System	E. coli
Theoretical Molecular Weight	17.1 kDa
Formulation	Lyophilized from a 0.2 μ m filtered solution in 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 sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/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.