

Rev03 DATASHEET

Update: Dec,14,2021

## IL-1α, Human

Cat. No.: Z02698

## **Product Introduction**

Species	Human
Protein Construction	IL-1α (Ser113-Ala271) Accession # P01583
Purity	> 97% as analyzed by SDS-PAGE > 97% 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 a cell proliferation assay using murine D10S cells is less than 1.0 pg/ml, corresponding to a specific activity of > 1.0 $\times$ 10 $^9$ IU/mg.
Expression System	E. coli
Theoretical Molecular Weight	18 kDa
Formulation	Lyophilized from a 0.2 μm 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 :** IL-1 alpha is a non-secreted proinflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. Both IL-1alpha and IL-1beta binds to the same receptor and has similar if not identical biological properties. These cytokines have a broad range of activities including, stimulation of thymocyte proliferation, by inducing IL-2 release, B-cell maturation and proliferation, mitogenic FGF-like activity and the ability to stimulate the release of prostaglandin and collagenase from synovial cells. However, whereas IL-1 beta is a secreted cytokine, IL-1 alpha is predominantly a cell-associated cytokine.

Synonyms: IL1A; IL-1A; IL1; IL1-ALPHA; IL1F1; interleukin 1 alpha; IL-1 alpha; IL-1α



For laboratory research use only. Direct human use, including taking orally and injection and clir orbidden.	nical use are