

Rev04  
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**DATASHEET**

# IL-1 $\beta$ , Human(CHO-expressed)

Cat. No.: Z02978

## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	IL-1 $\beta$ (Ala117-Ser269) Accession # P01584
<b>Purity</b>	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
<b>Endotoxin Level</b>	< 0.2 EU/ $\mu$ g of protein by gel clotting method
<b>Biological Activity</b>	ED <sub>50</sub> < 10.0 pg/ml, measured in a cell proliferation assay using D10S cells, corresponding to a specific activity of >1.0 $\times$ 10 <sup>8</sup> units/mg.
<b>Expression System</b>	CHO
<b>Apparent Molecular Weight</b>	~17 kDa, on SDS-PAGE under non-reducing conditions.
<b>Formulation</b>	Lyophilized after extensive dialysis against PBS.
<b>Reconstitution</b>	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O or PBS up to 100 $\mu$ g/ml.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## Background

**Target Background** : Interleukin 1 beta is a proinflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. Both IL-1 alpha and IL-1 beta 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** : IL1B; IL-1; IL1-BETA; IL1F2; interleukin 1 beta; IL1beta

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