

Rev03  
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**DATASHEET**

# IL-1 $\beta$ , Porcine

Cat. No.: Z03278

## Product Introduction

<b>Species</b>	Porcine
<b>Protein Construction</b>	Expressed with an N-terminal Met. <b>IL-1<math>\beta</math> (Ala115-Pro267) Accession # P26889</b>
<b>Purity</b>	> 95% as analyzed by SDS-PAGE
<b>Endotoxin Level</b>	< 0.2 EU/ $\mu$ g of protein by gel clotting method
<b>Biological Activity</b>	ED <sub>50</sub> < 1.0 ng/ml, measured by the dose-dependent stimulation of mouse D10S cells, corresponding to a specific activity of 1.0 $\times$ 10 <sup>6</sup> IU/mg.
<b>Expression System</b>	E. coli
<b>Apparent Molecular Weight</b>	~17.7 kDa, on SDS-PAGE under 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 (rpIL-1 $\beta$ ) is a proinflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. IL-1 $\alpha$  and IL-1 $\beta$  are structurally related polypeptides that share approximately 27% amino acid (aa) identity in porcine. While IL-1 $\alpha$  and IL-1 $\beta$  are regulated independently, they bind to the same receptor and exert identical biological effects. IL-1 $\beta$  stimulates thymocyte proliferation by inducing il-2 release, b-cell maturation and proliferation, and fibroblast growth factor activity.

**Synonyms :** IL1B; IL-1; IL1-BETA; IL1F2; interleukin 1 beta; IL1beta

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