

Product Information

Catalog Number	KD-009
Species	Human
Protein Construction	IL-1 β (Ala117-Ser269), Accession # NP_000567
Tag	No tag
Expression System	<i>E. coli</i>
Purity	> 95% as determined by SDS-PAGE
Predicted Molecular Mass	17 kDa
SDS-PAGE	17 kDa, under reducing conditions
Endotoxin	<0.1 EU/ μ g of the protein by the LAL method
Biological Activity	Measured by its ability to induce IFN- γ secretion by NK-92 human natural killer lymphoma cells. The ED50 for this effect is <5 ng/mL.
Formulation	Lyophilized from a 0.22 μ m filtered solution in PBS
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder at 100 μ g/mL in sterile deionized water
Storage & Stability	Use a manual defrost freezer and avoid repeated freeze-thaw cycles 12 months from date of receipt, at lower than -70 °C as supplied 1 week, 2 to 8 °C under sterile conditions after reconstitution 1 month, -20 to -70 °C under sterile conditions after reconstitution
Usage	Research use only

Product Data

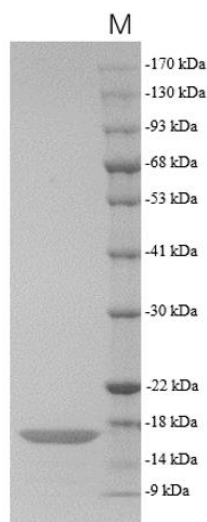


Figure 1. SDS-PAGE analysis with 2 μ g recombinant human IL-1 β per lane, under reducing conditions, showing bands at 17 kDa

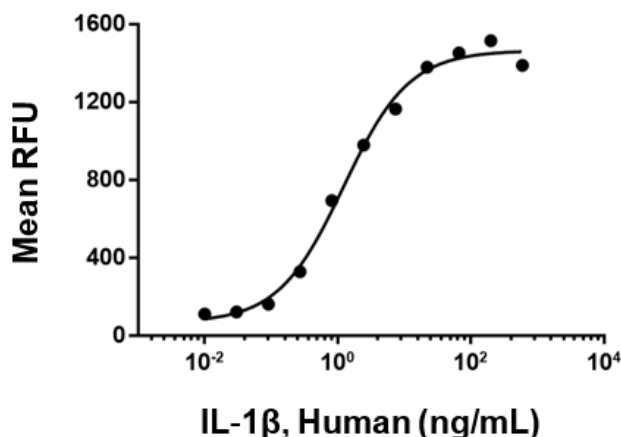


Figure 2. Biological activity measured by its ability to induce IFN- γ secretion by NK-92 cells, ED50 for this effect is <5 ng/mL

Background

Interleukin-1 beta (IL-1 β) 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.