

Product Information

HumanKine™ Interleukin-1 β , human recombinant, expressed in HEK 293 cells

Catalog Number **H6291**

Storage Temperature -20°C

Synonyms: IL-1beta, IL-1 β

Product Description

HumanKine™ recombinant human IL-1 β , expressed in human 293 cells, is a glycosylated monomer with a molecular mass of 18–25 kDa. Production in human 293 cells offers authentic glycosylation. Glycosylation contributes to stability in cell growth media and other applications.

IL-1 β is a proinflammatory cytokine produced by monocytes, activated macrophages, T cells, neutrophils, B cells, and NK cells. It stimulates T helper cells, promotes immunoglobulin synthesis and B cell proliferation, and has inhibitory properties on endothelial cells.

The two closely related agents, interleukin-1 α (IL-1 α) and interleukin-1 β (IL-1 β) share a 62% homology in their amino acid sequences and elicit nearly identical biological responses.

This product is lyophilized from a PBS solution.

ED₅₀: ≤ 0.16 ng/mL

The specific activity was determined by the dose-dependent stimulation of the proliferation of mouse D10S cells.

Purity: $\geq 95\%$ (SDS-PAGE)

Endotoxin level: ≤ 1 EU/ μg

Preparation Instructions

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile PBS containing 0.1% endotoxin-free recombinant human serum albumin.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store the product at -20°C . The lyophilized product remains active for one year at -20°C .

Upon reconstitution, the cytokine can be stored at $2-8^{\circ}\text{C}$ for short term only, or at -20°C to -80°C in aliquots for long term. Avoid repeated freeze-thaw cycles.

References

1. Allan, S.M. et al., Nat. Rev. Immunol., **5**, 629-640 (2005).
2. Savage, N., et al., Cytokine, **1**, 23-35 (1989).

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