

## Product Information

# HumanKine® Interleukin-1 $\beta$ , Human

Recombinant, expressed in HEK 293 cells

**H6291**

Storage Temperature: -20 °C

Synonyms: IL-1beta, IL-1 $\beta$

## Product Description

HumanKine® recombinant human IL-1  $\beta$ , 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  $\beta$  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 $\alpha$  (IL-1 $\alpha$ ) and interleukin-1  $\beta$  (IL-1  $\beta$ ) share a 62% homology in their amino acid sequences and elicit nearly identical biological responses.

The activity was  $\leq 0.05$  ng/mL EC<sub>50</sub> and the product is lyophilized from a 0.2  $\mu$ m filtered solution of 1X PBS.

### Purity

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

### Endotoxin Level

$\leq 1$  EU/mg

## 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 Safety Data Sheet for information regarding hazards and safe handling practices.

## Storage/Stability

Store the product at -20 °C.

Upon reconstitution, the cytokine can be stored at 2–8 °C for 1 week, or at -20 °C to -80 °C in aliquots for 6 months. Avoid repeated freeze-thaw cycles.

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## References

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

**Note:** Humankine is a registered trademark of Proteintech Group, Inc. and Humanzyme, Inc.

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