

Product Information

HumanKine™ Interleukin-1 β , Human

Recombinant, expressed in HEK 293 cells

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.

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

Purity

≥ 95% (SDS-PAGE)

Endotoxin Level

≤ 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 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).

Notice

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

The information in this document is subject to change without notice and should not be construed as a commitment by the manufacturing or selling entity, or an affiliate. We assume no responsibility for any errors that may appear in this document.

Technical Assistance

Visit the tech service page at SigmaAldrich.com/techservice.

Terms and Conditions of Sale

Warranty, use restrictions, and other conditions of sale may be found at SigmaAldrich.com/terms.

Contact Information

For the location of the office nearest you, go to SigmaAldrich.com/offices.

The life science business of Merck operates
as MilliporeSigma in the U.S. and Canada.

Merck and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.

© 2010-2025 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.
23179363 Rev 01/25

