

Product Information

HumanKine® Interleukin-10, Human

Recombinant, Expressed in HEK 293 cells

H7541

Storage Temperature: -20 °C

Synonym: IL-10

Product Description

HumanKine® IL-10 is expressed in human 293 cells as a glycosylated, non-disulfide linked homodimer with an apparent molecular mass of 17 kDa due to glycosylation. Glycosylation contributes to stability in cell growth media and other applications.

The cellular sources of IL-10 are CD4+ T cells and T cell clones, thymocytes, B cells and B cell lymphomas, macrophages, mast cell lines, and keratinocytes.¹ IL-10 inhibits the production of several cytokines, IFN- γ , IL-2, IL-3, TNF, and GM-CSF. It is an antagonist of IL-12 and inhibits the secretion of TNF- α . IL-10 is a chemoattractant for T lymphocytes toward CD8+ cells, but not CD4+ cells. It also stimulates the growth of mast cells, is a cytotoxic T cell differentiation factor, and stimulates B cell differentiation.

This product is lyophilized from 0.671 mg/mL of a 0.2 μ m filtered solution in 10 Mm Tris-HCl, pH 7.4, with 150 mM NaCl.

EC₅₀: 0.18-2.0 ng/mL

The activity is determined by the dose-dependent proliferation of mouse MC/9 cell line (mouse mast cell line) in the presence of 0.18-2.0 ng/mL IL-4.

Purity: >95% (SDS-PAGE)

Endotoxin level: <1 EU/ μ g by the LAL method.

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.

Preparation Instructions

Briefly centrifuge the vial before opening. Reconstitution is recommended at 0.2 mg/mL using sterile 1 X PBS + 0.1% HSA.

Storage/Stability

Store the product at -20 °C. The lyophilized product remains active for two years at room temperature. Upon reconstitution, the cytokine can be stored at -20 to -80 °C for up to 6 months. Avoid repeated freeze-thaw cycles.

References

1. Rennick, D., et al., Prog.Growth Factor Research, 4, 207 (1992).
2. Thompson-Snipes, L. et al., J. Exp. Med., 173, 507- 510 (1991).
3. Syto, R. et al., Biochemistry, 37, 16943-16951 (1998).

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 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 and/or its affiliates. All Rights Reserved.
23249643 Rev 07/25

