

Product Information

Interleukin-10 human recombinant, expressed in baculovirus infected Sf 21 cells, cell culture tested

Product Number **I9276**

Synonym: IL-10

Product Description

Interleukin-10 is a non-glycosylated polypeptide consisting of 160 amino acids.¹ There is 73% homology between the human and mouse IL-10 proteins; however, the human IL-10 acts on both human and mouse target cells, while the mouse IL-10 has species specific activity.¹

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.² IL-10 will stimulate the growth of stem cells, mast cells, and thymocytes.² IL-10 enhances cytotoxic T cell development,³ and co-stimulates B cell differentiation and immunoglobulin secretion.⁴ It inhibits cytokine production by macrophages² and suppresses macrophage class II MHC expression.⁵

The human IL-10 gene is on human chromosome 1.⁶
The molecular mass of human IL-10 is 18 kDa.²

Reagent

Lyophilized from a 0.2 µm filtered solution of phosphate buffered saline, pH 7.4, containing 50 µg bovine serum albumin/µg IL-10

Product Profile

Purity: ≥97% (SDS-PAGE)

The biological activity of human recombinant IL-10 is determined in a cell proliferation assay using MC/9-2 cells, a mouse mast cell line.⁷ The EC₅₀ is defined as the effective concentration of growth factor that elicits a 50% increase in cell growth in a cell based bioassay.

EC₅₀: 0.1–0.5 ng/ml

Endotoxin: <1.0 EU/µg of IL-10 (LAL method)

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.

Preparation Instructions

Reconstitute the contents of the vial using 0.2 µm filtered PBS containing 0.1% HSA or BSA to a concentration not less than 50 µg/ml.

Storage/Stability

Store the product at –20 °C.

After reconstitution, store at 2–8 °C for a maximum of 3 months. For extended storage, freeze in working aliquots at –70 °C or –20 °C. Repeated freezing and thawing is not recommended.

References

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3. Chen, W.F. et al., *J. Immunol.*, **147**, 528 (1991).
4. Rousset, F. et al., *Proc. Natl. Acad. Sci. USA*, **89**, 1890 (1992).
5. de Waal-Malefyt, R. et al., *J. Exp. Med.*, **174**, 915 (1991).
6. Kim, J.M. et al., *J. Immunol.*, **148**, 3618 (1992).
7. Thompson-Snipes, L. et al., *J. Exp. Med.*, **173**, 507 (1991).

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