

Recombinant Human Interleukin-10 (rh IL-10) source CHO

Synonyms: IL-10A, B-TCGF, TGIF, Cytokine synthesis inhibitory factor (CSIF).

Introduction: IL 10 is a cytokine produced primarily by monocytes and to a lesser extent by lymphocytes. This cytokine has pleiotropic effects in immunoregulation and inflammation. It down-regulates the expression of Th1 cytokines, MHC class II Ags and costimulatory molecules on macrophages. It also enhances B cell survival, proliferation and antibody production. This cytokine can block NF-kappa B activity and is involved in the regulation of the JAK- SATA signaling pathway. Knockout studies in mice suggested the function of this cytokine as an essential immunoregulator in the intestinal tract.

Description: Recombinant human IL-10 produced in CHO is a single, glycosylated polypeptide chain containing 161 amino acids and having a molecular mass of 18.6 kDa. The rh IL-10 is purified by proprietary chromatographic techniques.

Source: *Chinese Hamster Ovary Cells*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: The protein was lyophilized from a concentrated (1 mg/ml) solution containing 60mM PBS,pH 6.5, 50mg BSA and 100mM NaCl.

The aliquots of 1µg and 2 µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh IL-10 in sterile H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh IL-10 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rh IL-10 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity: Greater than 98.0% as determined by RP-HPLC and by SDS-PAGE.

Amino acid sequence: The sequence of the first five N-terminal amino acids was determined and was found to be Ser-Pro-Gly-Gln-Thr.

Biological Activity: The ED₅₀ as determined by the dose-dependant co-stimulation with murine IL-4 of MC-9 cells was found to be < 2 ng/ml, corresponding to a specific activity of 1.5 x 10⁷ IU/mg.

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	11349102
<i>medium</i>	10 µg	Cat.N°	11349103

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