



Product Datasheet

Product Name	Interleukin-10 Human Recombinant
Cata No	CB500402
Source	<i>Escherichia Coli.</i>
Synonyms	B-TCGF, CSIF, TGIF, IL-10, IL10A, MGC126450, MGC126451, Cytokine synthesis inhibitory factor.

Description

IL10 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-STAT signaling pathway. Knockout studies in mice suggested the function of this cytokine as an essential immunoregulator in the intestinal tract.

Interleukin-10 Human Recombinant produced in E.coli is a non covalent dimer of 2 polypeptide chains containing 161 amino acids each and having a molecular mass of 18606.29 Dalton.

The IL-10 is purified by proprietary chromatographic techniques

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

The ED50 as determined by the dose-dependant

stimulation of mouse MC-9 cells was found to be < 0.5 ng/ml, corresponding to a Specific Activity of 3×10^6 IU/mg.

Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The protein was lyophilized from a concentrated (1mg/ml) solution containing no additives.

Stability

Lyophilized Interleukin-10 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL10 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.

Sequence

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