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IL10 Human

Interleukin-10 Human Recombinant
CYK0357

Product Overview

Name	IL10 Human
Description	
Interleukin-10 Human Recombinant	
Accession (Primary)	P22301
Synonyms	
B-TCGF, CSIF, TGIF, IL-10, IL10A, MGC126450, MGC126451, Cytokine synthesis inhibitory factor.	
Introduction	
Recombinant 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.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
Lyophilized from a 0.2 μm filtered concentrated (1mg/ml) solution in PBS, pH 7.4.	
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.	
Purity	
Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.	
Amino acid sequence	
MSPGQGTQSE NSCTHFPGNL PNMLRDLRDA FSRVKTFFQM KDQLDNLLLK ESLLEDFKGY LGCQALSEMI QFYLEEVMPQ AENQDPDIKA HVNSLGENLK TLRLRLRRCH RFLPCENKSK AVEQVKNAFN KLQEKGIYKA	

MSEFDIFINY IEAYMTMKIR N.

Biological Activity

The ED 50 as determined by the dose-dependent co-stimulation (with murine IL-4) of MC/9 cells was found to be less than 2.0ng/ml, corresponding to a specific activity of 5.0×10 5 IU/mg.

Solubility

It is recommended to reconstitute the lyophilized Interleukin-10 in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

References

1. Title :Activated signal transducer and activator of transcription-3 (STAT3) is a poor regulator of tumour necrosis factor- production by human monocytes. Publication :Article first published online: 9 JAN 2007 DOI:10.1111/j.1365-2249.2006.03291.x Link : IL10 prospec publication 2. Title :Suppressor of cytokine signalling-3 at pathological levels does not regulate lipopolysaccharide or interleukin-10 control of tumour necrosis factor-? production by human monocytes. Publication :Article first published online: 11 MAY 2006 DOI: 10.1111/j.1365-2567.2006.02383.x Link : IL10 Human prospec publication 3. Title :The Tyrosine Sulfate-rich Domains of the LRR Proteins Fibromodulin and Osteoadherin Bind Motifs of Basic Clusters in a Variety of HPR-binding Proteins, Including Bioactive Factors*. Publication :First Published on August 21, 2009, doi: 10.1074/jbc.M109.047076 October 16, 2009 The Journal of Biological Chemistry, 284, 28543-28553. Link : Interleukin-10 prospec publication

Precautions

IL10 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P22301)