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## **IL10**

## **Recombinant Human Interleukin-10**

Catalog No.CRI153AQuantity:2 μg

CRI153B 10 μg CRI153C 1 mg

Alternate Names: CSIF, TGIF, GVHDS, IL-10, IL10A

**Description:** Interleukin-10 (IL-10) is a cytokine produced primarily by macrophages and type 2 T

helper (Th2) cells. IL-10 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. The IL-10 dimer binds to two IL10-R-alpha/ IL-10R1 chains, resulting in recruitment of two IL-10 R-beta/ IL-10R2 chains and activation of a

signaling cascade involving JAK1, TYK2, and STAT3.

 Gene ID:
 3586

 UniProt ID:
 P22301

 Source:
 E. coli

Molecular Weight: Noncovalent homodimer, 18.8 kDa (161 aa)

**Formulation:** Lyophilized from a sterile filtered solution of 10 mM sodium phosphate, pH 7.5

**Purity:** ≥95% by reducing and non-reducing SDS-PAGE

**Endotoxin Level:**  $\leq 1 \text{ EU/}\mu\text{g}$ , by kinetic LAL

**Biological Activity:** ED<sub>50</sub>  $\leq$  5 ng/ml, determined by proliferation of mouse MC/9 cells.

Specific Activity: ≥ 2.0 x 10<sup>5</sup> units/mg, calibrated against recombinant human IL-10 WHO International

Standard (NIBSC code: 93/722).

Amino Acid Sequence: MSPGQGTQSE NSCTHFPGNL PNMLRDLRDA FSRVKTFFQM KDQLDNLLLK

ESLLEDFKGY LGCQALSEMI QFYLEEVMPQ AENQDPDIKA HVNSLGENLK TLRLRRCH RFLPCENKSK AVEQVKNAFN KLQEKGIYKA MSEFDIFINY

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**Reconstitution:** Centrifuge vial prior to opening. Add sterile distilled water to a concentration of

0.1 mg/mL and gently pipet solution up and down sides of vial. DO NOT VORTEX. Allow

several minutes for complete reconstitution.

**Storage & Stability:** Upon receipt, store as supplied at -20 °C to -80 °C for up to one year. Upon

reconstitution store at 2-8 °C for up to one month. For long term storage reconstitute in

E-mail: info@cellsciences.com

Website: www.cellsciences.com

working aliquots containing 0.1% BSA and store at -80 °C.

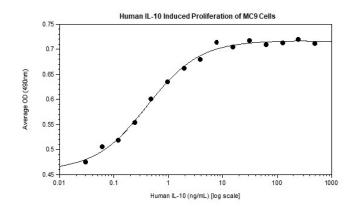
Toll Free: 888-769-1246

Phone: 978-572-1070

Fax: 978-992-0298

Avoid repeated freeze-thaw cycles.

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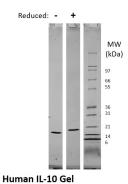


Figure: 1 ug in each lane (-) nonreducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human IL-10 is predicted to be a non-covalent homodimer and each

has a predicted MW of 18.8 kDa.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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