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## IL4

## Recombinant Human Interleukin-4 Animal Free

**Catalog No.** CRI104A-AF **Quantity**: 5 μg

CRI104B-AF 20 μg CRI104C-AF 1.0 mg

Alternate Names: IL-4, BCGF, BCDF, BSF-1, HCGF, MCGF-2, MFF, TCGF-2

**Description:** Interleukin-4 is a pleiotropic cytokine that regulates diverse T and B cell responses

including cell proliferation, survival and gene expression. Produced by mast cells, T cells and bone marrow stromal cells, IL-4 regulates the differentiation of naive CD4+ T cells

into helper Th2 cells. Another dominant function of IL-4 is the regulation of

immunoglobulin class switching to the IgG1 and IgE isotypes. Excessive IL-4 production

by Th2 cells has been associated with elevated IgE production and allergy. **Made without animal-derived components in an animal-free facility.** 

**Gene ID:** 3565

UniProt ID: P05112

Source: E. coli

Molecular Weight: Monomer, 15.1 kDa (130 aa)

**Formulation:** Lyophilized from sterile filtered solution containing 0.1% Trifluoroacetic Acid (TFA).

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

**Endotoxin Level:**  $\leq 0.1 \text{ EU/µg}$ , kinetic LAL

**Biological Activity:** ED<sub>50</sub>  $\leq$  0.250 ng/ml, determined by cell proliferation of human TF-1 cells.

**Specific Activity**:  $\geq 4.0 \times 10^6 \text{ U/mg}$ 

Amino Acid Sequence: MHKCDITLQE IIKTLNSLTE QKTLCTELTV TDIFAASKNT TEKETFCRAA

TVLRQFYSHH EKDTRCLGAT AQQFHRHKQL IRFLKRLDRN LWGLAGLNSC

PVKEANQSTL ENFLERLKTI MREKYSKCSS

**Reconstitution:** Centrifuge vial prior to opening. Add sterile distilled water to a concentration of 0.1

mg/mL. DO NOT VORTEX. Allow several minutes for complete reconstitution. Further

dilutions should be made in appropriate buffered solutions.

Toll Free: 888-769-1246

Phone: 978-572-1070

Fax: 978-992-0298

**Storage & Stability:** Upon receipt, store at -20°C to -80°C for up to 1 year.

Upon reconstitution, the preparation is stable for up to one month at 2-8°C. For long term storage, freeze in working aliquots with 0.1% BSA and store at -20°C to -80°C. **Avoid** 

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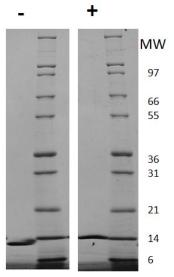
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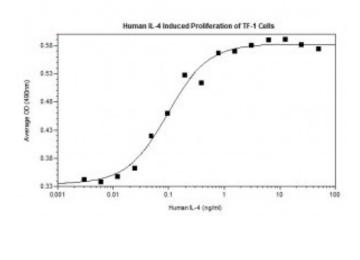
repeated freeze-thaw cycles.

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Figure: 1 µg in each lane (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassir Blue.

Human IL-4 Induced Proliferation of TF-1 Cells





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

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