IL4
Recombinant Human Interleukin-4

Catalog No.	CRI104A	**Quantity:**	5 µg
	CRI104B		20 µg
	CRI104C		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.

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: ≤1 EU/µg, kinetic LAL

Biological Activity: ED_{50} ≤ 250 pg/ml, determined by cell proliferation of human TF-1 cells.

Specific Activity: ≥4.0 x 10^6 IU/mg, calibrated against rhIL-4 WHO International Standard (NIBSC code: 88/656).

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 dilution should be made in appropriate buffered solutions.

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 repeated freeze-thaw cycles.**

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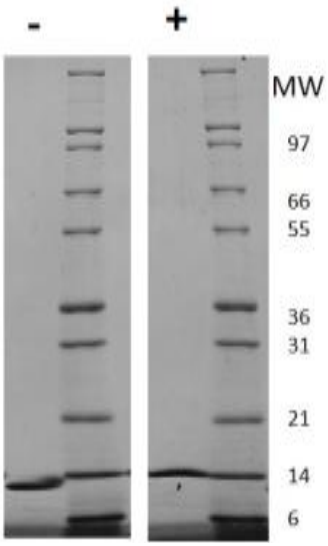
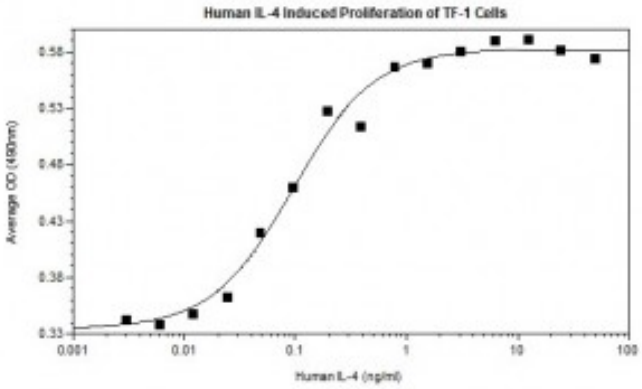
Figure: 1 µg in each lane (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassir Blue.



Human IL-4 Induced Proliferation of TF-1 Cells



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