

## Human IL-4 Recombinant Protein

**Catalog Number:** 14-8049

**Also Known As:** Interleukin-4, IL4

**For Research Use Only. Not for use in diagnostic procedures.**

### Product Information

**Contents:** Human IL-4 Recombinant Protein

**REF** **Catalog Number:** 14-8049

**Handling Conditions:** For best recovery, quick-spin vial prior to opening. Use in a sterile environment

**Source:** E. coli expressed amino acids His 25-Ser 153 of mature human IL-4 accession # AF 395008


**Molecular Mass:** The protein is not methionylated at the N-terminal and has a predicted molecular mass of 14,963. The DTT reduced protein migrates as a 15 kDa polypeptide on SDS-PAGE and the non-reduced protein migrates with slightly greater mobility.

**Purity:** > 98%, as determined by SDS-PAGE


**Endotoxin Level:** Less than 0.01 ng/ug cytokine as determined by the LAL assay.

**Bioactivity:** The ED50 of this protein, as measured by TF-1 cell proliferation assay, is less than or equal to 175 pg/mL. This corresponds to a specific activity of greater than or equal to 5.7 x 10<sup>6</sup> Units/mg.

**Formulation:** Sterile liquid; phosphate buffered saline, pH 7.2, 1.0% BSA. 0.22 um filtered.

 **Temperature Limitation:** Store at less than or equal to -70°C.

**LOT** **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

### Description

Human IL-4 is a ~15-19 kDa factor also known as BCDF, BCGF-1 and BSF-1. IL-4 is secreted by activated Th2 and natural killer T cells and to a lesser extent by Th1 and mast cells. IL-4 is species-specific and promotes proliferation and differentiation of B cells. IL-4 in conjunction with other signals such as CD40 induces Ig isotype switching of B cells and upregulation of surface antigens including MHC class II and CD23.

### Applications Reported

Recombinant human IL-4 is biologically active and can promote proliferation of B lymphocytes in culture. It is also used as standard cytokine in human IL-4 ELISA.

### Applications Tested

The ED50 of this protein, as measured by TF-1 cell proliferation assay, is less than or equal to 175 pg/mL. This corresponds to a specific activity of greater than or equal to 5.7 x 10<sup>6</sup> Units/mg.

### Related Products

13-7048 Anti-Human IL-4 Biotin (MP4-25D2)

14-7049 Anti-Human IL-4 Purified (8D4-8)

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