

Recombinant Human Interleukin 4, His-tagged

Cat. No. IL4-137H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Interleukin-4 protein, fused to His-tag at N-terminus, was expressed in <i>E.coli</i> and was purified by conventional chromatography techniques, after refolding of the isolated inclusion bodies in a renaturation buffer. MW = 17.2kDa (150aa).
Species	Human
Source	E.coli
Description	Interleukin-4 (IL-4) is a pleiotropic cytokine that has many biological roles, including the stimulation of activated B-cell and T-cell proliferation, and the differentiation of naïve helper T-cell to Th2 cells. Interleukin-4 is a co-stimulator of DNA-synthesis and induces the expression of class II MHC molecules on resting B-cells. It also enhances both secretion and cell surface expression of IgE and IgG1.
Amino Acid Sequence	MGSSHHHHHH SSGLVPRGSH MHKCDITLQE IIKTLNSLTE QKTLCTELTV TDIFAASKNT TEKETFCAA TVLRQFYSHH EKDTRCLGAT AQQFHRHKQL IRFLKRLDRN LWGLAGLNSC PVKEANQSTL ENFLERLKI MREKYSKCSS
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol.
Purity	> 95% by SDS – PAGE.
Concentration	1 mg/ml (determined by Bradford assay).
Endotoxin Level	< 1.0 EU per 1ug of protein (determined by LAL method).

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Storage

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION
Gene Name

IL4 interleukin 4 [Homo sapiens]

Synonyms

IL4; interleukin 4; BSF1; IL-4; BCGF1; BCGF-1; MGC79402; B-cell stimulatory factor 1; Interleukin-4; Lymphocyte stimulatory factor 1; Binetrakin; Pitrakinra; B-cell stimulatory factor 1; B_cell stimulatory factor 1

Gene ID

3565

mRNA Refseq

NM_000589

Protein Refseq

NP_000580

MIM

147780

UniProt ID

P05112

**Chromosome
Location**

5q31.1

Pathway

Allograft rejection; Asthma; Autoimmune thyroid disease; Cytokine-cytokine receptor interaction; Fc epsilon RI signaling pathway; Hematopoietic cell lineage; Jak-STAT signaling pathway; cell receptor signaling pathway

Function

cytokine activity; growth factor activity; interleukin-4 receptor binding; protein binding

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**Crystal structure of
human IL-4 (2INT).**

