

Active Recombinant Human IL4 (25-153aa), Met tagged

Cat. No. IL4-030E **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IL4 (His25 Ser153, with an Nterminal Met) was expressed in E. coli and produced using nonanimal reagent in an animalfree laboratory.
Species	Human
Source	E.coli
Description	Interleukin4 (IL4), also known as B cellstimulatory factor1, is a monomeric, approximately 13 kDa 18 kDa Th2 cytokine that shows pleiotropic effects during immune responses. It is a glycosylated polypeptide that contains three intrachain disulfide bridges and adopts a bundled four phelix structure. IL4 is primarily expressed by Th2biased CD4+ T cells, mast cells, basophils, and eosinophils . It promotes cell proliferation, survival, and immunoglobulin class switch to IgG4 and IgE in human B cells, acquisition of the Th2 phenotype by naïve CD4+ T cells, priming and chemotaxis of mast cells, eosinophils, and basophils, and the proliferation and activation of epithelial cells. IL4 plays a dominant role in the development of allergic inflammation and asthma.
Nterminal Sequence Analysis	Met
Molecular Mass	14 kDa
Activity	Measured in a cell proliferation assay using TF1 human erythroleukemic cells. The ED50 for this effect is typically 0.05 0.2 ng/mL.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>97%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.
Reconstitution	Reconstitute at 100 µg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 1. 12 months from date of receipt, 20 to 70 °C as supplied. 2. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 3. 3 months, 20 to 70 °C under sterile conditions after reconstitution.
Unitprot ID	P05112

GENE INFORMATION

Gene Name	IL4 interleukin 4 [Homo sapiens]
Official Symbol	IL4
Synonyms	IL4; interleukin 4; BSF1; IL-4; BCGF1; BSF-1; BCGF-1; MGC79402; interleukin-4; binetrakin; pitrakinra; B cell growth factor 1; B_cell stimulatory factor 1; lymphocyte stimulatory factor 1
Gene ID	3565

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mRNA Refseq	NM_000589
Protein Refseq	NP_000580
MIM	147780
Chromosome Location	5q31.1
Pathway	CD40/CD40L signaling; Calcium signaling in the CD4+ TCR pathway; Fc epsilon RI signaling pathway; IL-4 signaling Pathway; Jak-STAT signaling pathway; T cell receptor signaling pathway; Notch signaling pathway
Function	cytokine activity; growth factor activity; interleukin-4 receptor binding; protein binding
Crystal structure of human IL-4 (2INT)	