Recombinant Full Length Human IL4 Protein, C-Flag-tagged

Cat. No. IL4-1801HFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Full Length Human IL4 Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
Species	Human
Source	Mammalian Cells
Description	The protein encoded by this gene is a pleiotropic cytokine produced by activated T cells. This cytokine is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. This gene, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. This gene, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. IL4 is considered an important cytokine for tissue repair, counterbalancing the effects of proinflammatory type 1 cytokines, however, it also promotes allergic airway inflammation. Moreover, IL-4, a type 2 cytokine, mediates and regulates a variety of human host responses such as allergic, anti-parasitic, wound healing, and acute inflammation. This cytokine has been reported to promote resolution of neutrophil-mediated acute lung injury. In an allergic response, IL-4 has an essential role in the production of allergen-specific immunoglobin (Ig) E. This pro-inflammatory cytokine has been observed to be increased in COVID-19 (Coronavirus disease 2019) patients, but is not necessarily

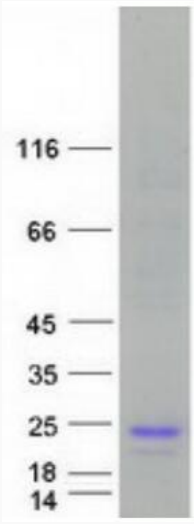
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	associated with severe COVID-19 pathology. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.
Form	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Molecular Mass	14.9 kDa
AA Sequence	MGLTSQLLPPLFFLLACAGNFVHGHKCDITLQEIIKTLNSLTEQKTLCTELTVTDIFAAS KNTTEKETFC RAATVLRQFYSHHEKDTRCLGATAQQFHRHKQLIRFLKRLDRNLWG LAGLNSCPVKEANQSTLENFLERL KTIMREKYSKCSS TRTRPLEQKLISEEDLAAND ILDYKDDDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining.
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade.
Concentration	>50 ug/mL as determined by microplate BCA method.
Preparation	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Protein Families	Druggable Genome, Secreted Protein
Protein Pathways	Allograft rejection, Asthma, Autoimmune thyroid disease, Cytokine-cytokine receptor interaction, Fc epsilon RI signaling pathway, Hematopoietic cell lineage, Jak-STAT signaling pathway, T cell receptor signaling pathway
Full Length	Full L.

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GENE INFORMATION

Gene Name	IL4 interleukin 4 [Homo sapiens (human)]
Official Symbol	IL4
Synonyms	BSF1; IL-4; BCGF1; BSF-1; BCGF-1
Gene ID	3565
mRNA Refseq	NM_000589.4
Protein Refseq	NP_000580.1
MIM	147780
UniProt ID	P05112



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Coomassie blue staining of purified IL4 protein.

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