

**PRODUCT INFORMATION**

<b>Target</b>	IL4
<b>Synonyms</b>	BSF1;BCGF1;BSF-1;BCGF-1;IL-4
<b>Description</b>	Recombinant Human IL4 Protein with C-terminal mouse Fc tag
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	P05112
<b>Expression Host</b>	HEK293
<b>Tag</b>	C-mouse Fc Tag
<b>Molecular Characterization</b>	IL4(His25-Ser153) mFc(Pro99-Lys330)
<b>Molecular Weight</b>	The protein has a predicted molecular mass of 41.2 kDa after removal of the signal peptide. The apparent molecular mass of IL4-mFc is approximately 35-55 kDa due to glycosylation.
<b>Purity</b>	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
<b>Formulation &amp; Reconstitution</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
<b>Storage&amp;Shipping</b>	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
<b>Sterility</b>	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.



**Background**

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 immunoglobulin (Ig) E. This pro-inflammatory cytokine has been observed to be increased in COVID-19 (Coronavirus disease 2019) patients, but is not necessarily associated with severe COVID-19 pathology. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, Aug 2020]

**Usage**

Research use only

**Conjugate**

Unconjugated





Figure 1. Human IL4 Protein, mFc Tag on SDS-PAGE under reducing condition.

DIMABIO CONFIDENTIAL

