# Recombinant Human IL-4 Protein

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Catalog No.: RP00995 Recombinant 3 Publications

# **Sequence Information**

**Species** Gene ID **Swiss Prot** Human 3565 P05112-1

## **Tags**

C-His

### **Synonyms**

BCGF-1; BCGF1; BSF-1; BSF1; IL-4;IL4;BCGF1;BSF-1;BSF1;IL-4

## **Product Information**

**Purification** Source

HEK293 cells ≥ 95 % as determined by SDS-

PAGE.≥ 95 % as determined by HPLC.

Calculated MW Observed MW

15.8 kDa 20-23 kDa

#### **Endotoxin**

< 0.1 EU/µg of the protein by LAL method.

#### **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## **Contact**

400-999-6126 8 cn.market@abclonal.com.cn  $\sim$ 

# **Background**

Interleukin-4, also known as IL4, is a secreted protein that belongs to the IL-4 / IL-13 family. Interleukin-4 / IL4 has many biological roles, including the stimulation of activated B-cell and T-cell proliferation. It enhances both secretion and cell surface expression of IgE and IgG1. Interleukin-4 / IL4 also regulates the expression of the lowaffinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes. Interleukin-4 is essential for the switching of B cells to IgE antibody production and the maturation of T helper (Th) cells toward the Th2 phenotype.

# **Basic Information**

### Description

Recombinant Human IL-4 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (His25-Ser153) of human IL-4 (Accession #NP 000580.1) fused with a 6×His tag at the C-terminus.

### **Bio-Activity**

Measured in a cell proliferation assay using TF 1 human erythroleukemic cells. The  $ED_{50}$  for this effect is 85-340 pg/mL, corresponding to a specific activity of 2.94  $\times$  $10^6 \sim 1.17 \times 10^7$  units/mg.

### **Shipping**

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

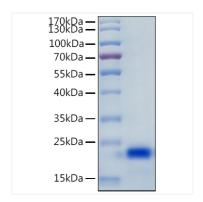
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

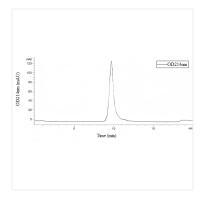
### **Operational Notes**

For your safety and health, please wear a lab coat and disposable gloves for handling.

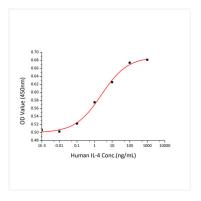
# **Validation Data**



Recombinant Human IL-4 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Human IL-4 Protein is greater than 95% as determined by SEC-HPLC.



Recombinant Human IL-4 stimulates cell proliferation of the TF-1 human erythroleukemic cells.The ED $_{50}$  for this effect is 85-340 pg/mL, corresponding to a specific activity of  $2.94\times10^6\sim1.17\times10^7$  units/mg.