

## Interleukin-4 (IL-4), Human



Cat. No. SR106-0100

Size: 100 µg

Cat. No. SR106-0020

Size: 20 µg

Cat. No. SR106-0005

Size: 5 µg

### Description

IL-4 is a pleiotropic cytokine produced by activated T cells. The IL-4 receptor also binds to IL-13, which may contribute many overlapping functions of IL-4 and IL-13. STAT6, a signal transducer and activator of transcription, is important in mediating the immune regulatory signal of this cytokine. This gene, IL-3, IL-5, IL-13, and CSF2 form a cytokine gene cluster on chromosome 5q. IL-4, IL-13 and IL-5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.

### Expression System

*Escherichia coli*

### Sequence

MHKCDITLQEIIKTLNSLTEQKTLCTELTVTDIFAASKNTEKETFCRAATVLRQFY  
SHHEKDRCLGATAQQFHRHKQLIRFLKRLDRNLWGLAGLNSCPVKEANQSTLE  
NFLERLKTIMREKYSKCSS with polyhistidine tag at the C-terminus

### Species

Human

### Tag

polyhistidine tag at the C-terminus

### Endotoxin Level

<0.1 EU per 1 µg of the protein by the LAL method.

### Activity

Measure by its ability to induce TF-1 cells proliferation.

The ED<sub>50</sub> for this effect is <0.2 ng/mL.

The specific activity of recombinant human IL-4 is approximately >2.8 x 10<sup>7</sup> IU/mg.

### Purity

>98% as determined by SDS-PAGE. Ni-NTA chromatography

### Formulation

The protein was lyophilized from a solution containing 1X PBS, pH 8.0.

### Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H<sub>2</sub>O to a concentration not less than 100 µg/mL and incubate the stock solution for at least 20 minutes to ensure sufficient re-dissolved.

### Storage

Lyophilized protein should be stored at -20°C.

This product is stable for one year upon receipt, when handled and stored as instructed.

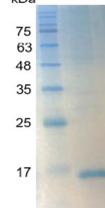
Upon reconstitution, protein aliquots should be stored at -20°C or -80°C.

Avoid repeated freeze/thaw cycles.

### Note

Please use within one month after protein reconstitution.

kDa



SDS-PAGE analysis of recombinant human IL-4

### Related Ordering Information

Cat. No.	Description	Size
CC103-0500	DMEM, High Glucose	500 ml
CC109-0500	RPMI 1640	500 ml
CC113-0500	DMEM/F-12	500 ml
PC203-0600	60mm Tissue Culture Dish, with Gripping Ring	600 ea
PC273-0100	75T Flask, Plug Seal Cap	100 ea

### Caution

- During operation, always wear a lab coat, disposable gloves, and protective equipment.
- Research Use Only. Not intended for any animal or human therapeutic or diagnostic uses.