

## Recombinant Mouse, IL4 / Interleukin-4, Animal Free & Carrier Free

Cat #: C-CYP113

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

### Product Overview

The interleukin 4 (IL4, IL-4) is a cytokine that induces differentiation of naive helper T cells (Th0 cells) to Th2 cells. Upon activation by IL-4, Th2 cells subsequently produce additional IL -4 in a positive feedback loop. The cell that initially produces IL-4, thus inducing Th2 differentiation, has not been identified, but recent studies suggest that basophils may be the effector cell. It is closely 3 / 4 related and has functions similar to Interleukin 13.

### Product Information

**Source:** *Escherichia Coli*.

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

**Biological Activity:** Measure by its ability to induce HT- 2 cells proliferation. The ED<sub>50</sub> for this effect is < 1 ng/mL. The specific activity of recombinant mouse IL-4 is approximately >1 x 10<sup>6</sup> IU/mg.

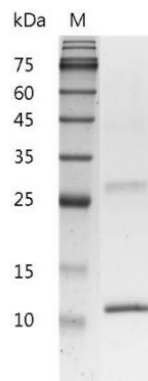
**Endotoxin:** < 0.1 EU per 1 µg of the protein by the LAL method.

**Amino acid sequence:**

MHIHGCDKNHLREIIGILNEVTGEGTPCTEMDVPNVLTATKNTTESELVCRASKVLRIFYLKHGKTPCLKKNSSVLMELQRLFRAFRCLDSSI

SCTMNESKSTSLKDFLESLSKSIMQMDYS with polyhistidine tag at the C- terminus

**Formulation:** Lyophilized from a sterile filtered aqueous solution in 1xPBS, pH 7.4.



SDS-PAGE analysis of recombinant mouse IL-4

## Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H<sub>2</sub>O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

## Storage

| Physical Appearance             | Storage        | Stability        |
|---------------------------------|----------------|------------------|
| Lyophilized powder              | -20°C to -80°C | 1 year           |
| Reconstitution (initial)        | 2°C to 8°C     | Less than 1 week |
| Reconstitution (after dilution) | -20°C to -80°C | 3 to 6 months    |

## Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.