

Recombinant Human, IL4 / Interleukin-4, Animal Free & Carrier Free

Cat #: C-CYP115

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 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 TF- 1 cells proliferation. The ED₅₀ for this effect is < 0.2 ng/mL. The specific activity of recombinant human IL-4 is approximately >2.8 x 10⁷ IU/mg.

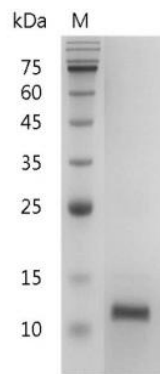
Endotoxin: < 0.1 EU per 1 µg of the protein by the LAL method.

Amino acid sequence:

MHKCDITLQEIIKTLNSLTEQKTLCTELTVTDIFAASKNTEKETFCRAATVLRQFYSHHEKDTRCLGATAQQFHRHKQLIRFLKRLDRNLWG

LAGLNSCPVKEANQSTLENFLERLKTIMREKYSKCSS with polyhistidine tag at the C- terminus

Formulation: Lyophilized from a sterile filtered aqueous solution in 1xPBS, pH 8.0.



SDS-PAGE analysis of recombinant human 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 H₂O. 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.