

Recombinant Human, IL31 / Interleukin-31,

Animal Free & Carrier Free

Cat #: C-CYP193

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

Interleukin-31 (IL-31) is an inflammatory cytokine that helps trigger cell-mediated immunity against pathogens. It has also been identified as a major player in a number of chronic inflammatory diseases, including atopic dermatitis. It is produced by a variety of cells, namely type 2 helper (TH2) T-cells. IL-31 sends signals through a receptor complex made of IL-31RA and oncostatin M receptor β (OSMR β) expressed in immune and epithelial cells. These signals activate three pathways: ERK1/2 MAP kinase, PI3K/AKT, and JAK1/2 signaling pathways.

Product Information

Source: *Escherichia Coli*.

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

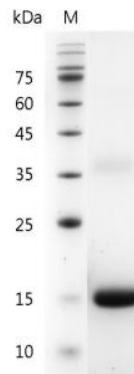
Biological Activity: Measured by its ability to induce A549 cells proliferation. The ED₅₀ for this effect is < 40 ng/mL.

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

Amino acid sequence:

MSHTLPVRLLRPSDDVQKIVEELQSLKMLLKDVVEEEKGVLVSQNYTLPCLSPPAQPPNNIHSPAIRAYLKTIRQLDNKSVIDEIIEHLDKLIQ
DAPETNISVPTDTCHECKRFILTISQQFSECMDLALKSLTSGAQQATT with polyhistidine tag at the C-terminus.

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



SDS-PAGE analysis of recombinant human IL-31

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.