

Recombinant Human, IL6 / Interleukin-6, Animal Free & Carrier Free

Cat #: C-CYP121

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

Interleukin 6 (IL-6) is an interleukin that acts as both a pro-inflammatory cytokine and an anti-inflammatory myokine. In humans, it is encoded by the IL6 gene. In addition, osteoblasts secrete IL-6 to stimulate osteoclast formation. Smooth muscle cells in the tunica media of many blood vessels also produce IL-6 as a proinflammatory cytokine. IL-6's role as an anti-inflammatory myokine is mediated through its inhibitory effects on TNF-alpha and IL-1, and activation of IL-1ra and IL-10.

Product Information

Source: *Escherichia Coli*.

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

Biological Activity: Measure by its ability to induce proliferation in TF-1 cells The ED₅₀ for this effect is < 0.5 ng/mL.

The specific activity of recombinant human IL-6 is approximately >5 x 10⁸ IU/mg. Measure by its ability to induce proliferation in MCF-7 cells. The ED₅₀ for this effect is < 4.4 ng/mL

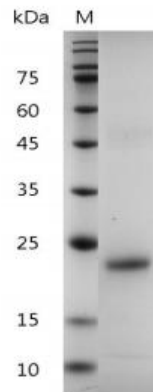
Endotoxin: < 0.1 EU per 1 µg of the protein by the LAL method.

Amino acid sequence:

MVPPGEDSKDVAAPHRQPLTSSERIDKQIRYILDGISALRKETCNKSNMCESSKEALAENNLNLPKMAEKDGCFSQSGFNEETCLVKIITGLLE
FEVYLEYLQNRFSSEEQARAVQMSTKVLIQFLQKKAKNLDAITTPDPTTNASLLTKLQAQNQWLQDMTTHLILRSFKEFLQSSLRALRQM

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-6

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.