

Recombinant Human, IL1 α / Interleukin-1 alpha, Animal Free & Carrier Free

Cat #: C-CYP100

Size: 5 μ g, 20 μ g, 100 μ g, 500 μ g, 1mg

Shipping: Blue Ice

Product Overview

Interleukin 1 alpha (IL-1 α) also known as hematopoietin 1 is a cytokine of the interleukin 1 family that in humans is encoded by the IL1A gene. IL-1 α is produced mainly by activated macrophages, as well as neutrophils, epithelial cells, and endothelial cells. It possesses metabolic, physiological, haematopoietic activities, and plays one of the central roles in the regulation of the immune responses. It binds to the interleukin-1 receptor. It is on the pathway that activates tumor necrosis factor-alpha.

Product Information

Source: *Escherichia Coli*.

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

Biological Activity: Measure by its ability to induce D10.G4.1 cells proliferation. The ED₅₀ for this effect is < 10 pg/mL.

The specific activity of recombinant human IL-1 alpha is approximately >1 x10⁸ IU/mg.

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

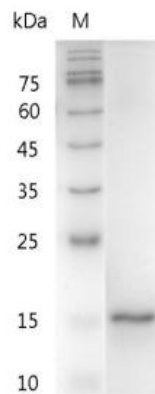
Amino acid sequence:

MSAPFSFLSNVKYNFMRIIKYEFILNDALNQSIIIRANDQYLTAALHNLDEAVKFDMGAYKSSKDDAKITVILRISKTKLYVTAQDEDQPVLL

KEMPEIPKTITGSETNLLFFWETHGTKNYFTSVAHPNLFIA TKQDYWVCLAGGPPSITDFQILENQA 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-1 alpha

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.