

CHAMOT

**重组人白细胞介素1 alpha /Recombinant IL-1 alpha,
Human, Animal-Free**

CM001-5HP

CM001-20HP

CM001-100HP

CM001-500HP

CM001-1000HP



CHAMOT

乔默®生物

Specialize In Cytokines

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重组人白细胞介素1 alpha /Recombinant IL-1 alpha, Human, Animal-Free

产品编号	CM001-5HP	CM001-20HP	CM001-100HP	CM001-500HP	CM001-1000HP
规格	5 µg	20 µg	100 µg	500 µg	1 mg

产品简介

背景描述

Interleukin-1 alpha (IL1 alpha or IL1 α) is a member of the interleukin-1 cytokine family, found constitutively present in epithelial layers of the entire gastrointestinal tract, lung, liver, kidney, endothelial cells, and astrocytes. The synthesized IL-1 alpha is a 31 kDa inactive precursor and can be cleaved by intracellular caspase-1 or extracellular proteases to generate the bioactive 17 kDa form and the 16 kDa N-terminal cleavage product. Both precursor and mature IL-1 alpha protein bind to the IL-1 receptor (IL-1R), initiating a cascade of inflammatory cytokines and chemokines production such as IL-6, IL-8, and TNF, in response to viral and bacterial pathogens conditions. IL-1 alpha plays a central role in immune-surveillance mechanisms, stimulating macrophages, neutrophils, and CD8+ T cells activity.

别称

interleukin 1 alpha, Hematopoietin-1, Lymphocyte-Activating Factor (LAF), Endogenous Pyrogen (EP), Leukocyte, IL1. IL1A

蛋白编码

P01583

分子量

The protein has a calculated MW of 19 kDa. The protein migrates as 17 kDa under reducing condition (SDS-PAGE analysis).

表达系统

Escherichia coli

纯度

The purity of Human IL-1 Alpha Protein is greater than 98% as determined by SDS-PAGE analysis and greater than 95% by RP-HPLC.

生物活性

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.

内毒素检测

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

蛋白序列

MSAPFSFLSNVKYNFMRIIKYEFILNDALNQSIIRANDQYLTAALHNLDEAVKFDMGAYKSSK
DDAKITVILRISKTKLYVTAQDEDQPVLLKEMPEIPKTTITGSETNLLFFWETHGKKNYFTSVAHPN
LFIATKQDYWVCLAGGPPSITDFQILENQA with polyhistidine tag at the C-terminus.

产品形式

The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 8.0. If you have any concerns or special requirements, please confirm with us.

产品应用

Cell Culture

产品使用

1. Before opening, centrifuge at 3000 rpm for 5 mins.

2. Initial Reconstitution

- Reconstitute the Lyophilized Protein in sterile H₂O to a concentration of 100-200 µg/mL.
- Then, incubate it at room temperature for at least 20 mins to ensure sufficient dissolution.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

- Store at 2°C to 8°C for up to 1 week.

3. Extended Storage

- After the initial reconstitution, further dilute the reconstituted protein in a buffer containing a carrier protein or stabilizer (e.g., 0.1% BSA, 10% FBS, 5% HSA, or 5% trehalose solution). The final concentration is not less than 10 µg/ml.

- Prepare aliquots (≥20 µl).
- Store at -20°C or -80°C for 3 to 6 months.

Avoid repeated freeze-thaw cycles.

产品储存/运输**储存**

Lyophilized Protein: Store at -20°C for 1 year.

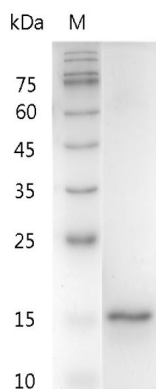
Initial Reconstitution: Store at 2°C to 8°C for up to 1 week.

Extended Storage: Store at -20°C or -80°C for 3 to 6 months with a carrier protein or stabilizer.

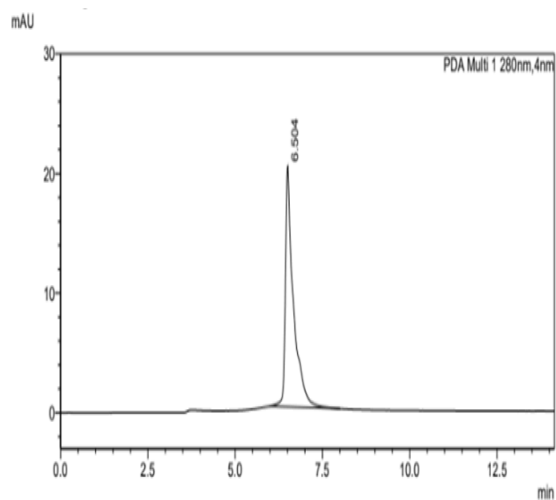
运输

Blue Ice

实验数据展示



SDS-PAGE analysis of recombinant human IL-1
alpha



HPLC analysis of recombinant human IL-1 alpha. The purity of
human IL-1 alpha Protein is greater than 95% as determined by
RP-HPLC.

For Research Use or Further Manufacturing Only

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