

# CHAMOT

**重组人肿瘤坏死因子 $\alpha$  /Recombinant TNF alpha,  
Human, Animal-Free**

**CM046-20HP**

**CM046-100HP**

**CM046-500HP**

**CM046-1000HP**



**CHAMOT**

乔默®生物

*Specialize In Cytokines*

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## 重组人肿瘤坏死因子 $\alpha$ /Recombinant TNF alpha, Human, Animal-Free

|      |            |             |             |              |
|------|------------|-------------|-------------|--------------|
| 产品编号 | CM046-20HP | CM046-100HP | CM046-500HP | CM046-1000HP |
| 规格   | 20 $\mu$ g | 100 $\mu$ g | 500 $\mu$ g | 1 mg         |

### 产品简介

**背景描述** Tumor necrosis factor alpha (TNF alpha) stimulates the acute phase of the immune response. In response to a pathogen, TNF alpha is one of the first to be released and can apply its effects in many organs. TNF alpha stimulates the release of corticotrophic releasing hormone, suppresses appetite, and induces fever, in the hypothalamus. TNF increase vasodilation and loss of vascular permeability, it helps recruit lymphocyte, neutrophil, and monocyte to the inflammation site by regulating chemokine release.

**别称** tumor necrosis factor alpha, TNFSF2, Cachectin, Differentiation-inducing factor (DIF), Necrosin, Cytotoxin, TNSF1A

**蛋白编码** P01375

**分子量** The protein has a calculated MW of 18.3 kDa. The protein migrates as 17 kDa under reducing condition (SDS-PAGE analysis).

**表达系统** Escherichia coli

**纯度** >97% as determined by SDS-PAGE.

**生物活性** Measure by its ability to induce cytotoxicity in L929 cells in the presence of actinomycin D. The ED<sub>50</sub> for this effect is < 0.1 ng/mL. The specific activity of recombinant human TNF alpha is approximately  $\geq 1 \times 10^7$  IU/mg.

**内毒素检测** <0.1 EU per 1  $\mu$ g of the protein by the LAL method.

**蛋白序列** MVRSSSRTPSDKPVAHVVANPQAEGQLQWLNRRANALLANGVELRDNQLVVPSEGLYLIYS QVLFKGQGPCSTHVLLTHTISRIAVSYQTKVNLLSAIKSPCQRETPEGAEAKPWYEPIYLGGVFQ LEKGDRLSAEINRPDYLDFAESGQVYFGIIAL with polyhistidine tag at the C-terminus.

**产品形式** The protein was lyophilized from a 0.2  $\mu$ m filtered solution containing 500 mM NaCl PBS, pH 7.4. If you have any concerns or special requirements, please confirm with us.

## 产品使用

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

### 2. Initial Reconstitution

- Reconstitute the Lyophilized Protein in sterile H<sub>2</sub>O 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

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

### 储存

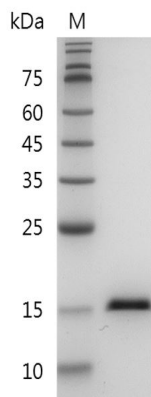
**Initial Reconstitution:** Store at 2°C to 8°C for up to 1 week.

**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 TNF alpha

## 文献引用

- Isolation, structure modification, and anti-rheumatoid arthritis activity of isopimarane-type diterpenoids from *Orthosiphon aristatus*. *J Enzyme Inhib Med Chem*. 2024; 39(1): 2296355. (IF 5.6) (Human TNF- $\alpha$ )
- Lignan glucosides from *Gentiana macrophylla* with potential anti-arthritis and hepatoprotective activities. *Phytochemistry*. 2024 Jan;217:113920. (IF 4.186 ) (Human TNF- $\alpha$ )
- Network pharmacology and experimental validation of inflammation inhibition by ChuanKeZhi Injection in treating asthma. *Phytomedicine*. 2025 Jul 25;143:156891. (IF 8.3) (Human TNF- $\alpha$ )

For Research Use or Further Manufacturing Only

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