

CHAMOT

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

CM046-20HP

CM046-100HP

CM046-500HP

CM046-1000HP



CHAMOT

乔默®生物

Specialize In Cytokines

CONTENT

1 产品简介

2 产品使用

3 产品储存/运输

4 实验数据展示

5 文献引用

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

产品编号	CM046-20HP	CM046-100HP	CM046-500HP	CM046-1000HP
规格	20 µg	100 µg	500 µg	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 corticotropic 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 ED₅₀ 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 µg 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 µm 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 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

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

储存

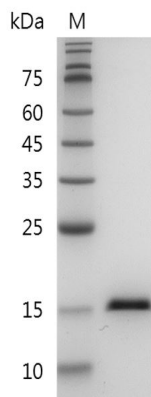
Initial Reconstitution: Store at 2°C to 8°C for up to 1 week.

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- α)
- Lignan glucosides from *Gentiana macrophylla* with potential anti-arthritis and hepatoprotective activities. *Phytochemistry*. 2024 Jan;217:113920. (IF 4.186)(Human TNF- α)
- 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- α)

For Research Use or Further Manufacturing Only

Chamot Biotechnology(Shanghai) Co., Ltd. www.chamot-bio.com

Tel: 021-51880030 Mail: info@chamot-bio.com QQ: 864920491