

产品名称: GMP Recombinant Human TNF- $\alpha$   
产品货号: PCH90043

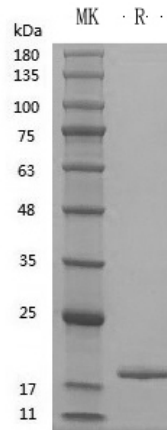


## 概述 (Summary)

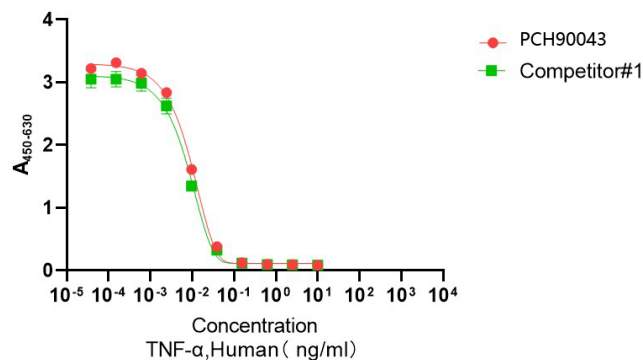
英文全称	TNF- $\alpha$
纯度 (Purity)	Greater than 95% as determined by reducing SDS-PAGE
内毒素 (Endotoxin level)	$\leq 10$ EU/mg
蛋白构建 (Construction)	Recombinant Human TNF- $\alpha$ is produced by our Mammalian cell expression system and the target gene encoding Val77-Leu233 is expressed.
Accession #	P01375
蛋白标签 (Tag)	Tag free
表达宿主 (Host)	Mammalian cell
种属 (Species)	Human
预测分子量 (Predicted MW)	17.4 kDa
蛋白形态 (Form)	Lyophilized
储存缓冲液 (Buffer)	PBS, 5% mannitol and 0.01% Tween 80, pH 7.4
运输方式 (Shipping)	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存 (Stability &Storage)	36 months at -20°C to -80°C in lyophilized state. 6 months at -20°C to -80°C under sterile conditions after reconstitution. 7-10 days at 2°C to 8°C under sterile conditions after reconstitution. Please minimize freeze-thaw cycles.
复溶 (Reconstitution)	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 $\mu$ g/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## 电泳图 (SDS-PAGE image)

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### 活性验证图 (Bioactivity image)



Measured in a cytotoxicity assay using L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The ED<sub>50</sub> for this effect is 5-60 pg/mL.

### 背景 (Background)

#### 分子别名 (Alternative Names)

tumor Necrosis Factor; Cachectin; TNF-Alpha; Tumor Necrosis Factor Ligand Superfamily Member 2; TNF-a; TNF; TNFA; TNFSF2

#### 背景介绍 (References)

Tumor Necrosis Factor- $\alpha$  (TNF- $\alpha$ ) is secreted by macrophages, monocytes, neutrophils, T-cells, and NK-cells following stimulation by bacterial LPS. Cells expressing CD4 secrete TNF- $\alpha$  while cells that express CD8 secrete little or no TNF- $\alpha$ . Synthesis of TNF- $\alpha$  can be induced by many different stimuli including interferons, IL2, and GM-CSF. The clinical use of the potent anti-tumor activity of TNF- $\alpha$  has been limited by the proinflammatory side effects such as fever, dose-limiting hypotension, hepatotoxicity, intravascular thrombosis, and hemorrhage. Designing clinically applicable TNF- $\alpha$  mutants with low systemic toxicity has been of intense pharmacological interest. Human TNF- $\alpha$  that

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binds to murine TNF-R55 but not murine TNF-R7, exhibits retained anti-tumor activity and reduced systemic toxicity in mice compared with murine TNF- $\alpha$ , which binds to both murine TNF receptors. Based on these results, many TNF- $\alpha$  mutants that selectively bind to TNF-R55 have been designed. These mutants displayed cytotoxic activities on tumor cell lines in vitro and have exhibited lower systemic toxicity in vivo. Recombinant Human TNF- $\alpha$  High Active Mutant differs from the wild-type by amino acid substitution of amino acids 1-7 with Arg8, Lys9, Arg10 and Phe157. This mutant form has been shown to have increased activity with less inflammatory side effects in vivo.

**注意事项 (Note)**

For research use only .