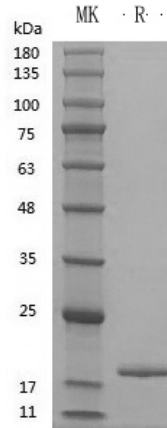


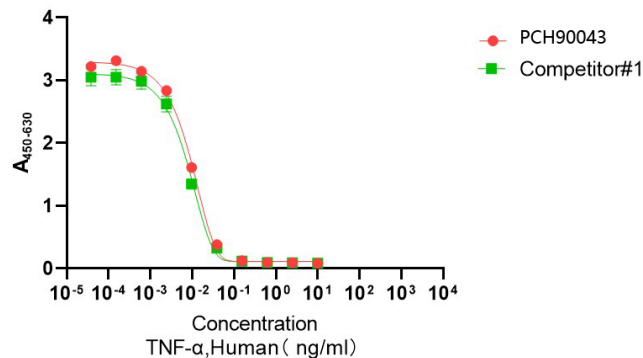
Summary

Name	TNF- α
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	≤ 10 EU/mg
Construction	Recombinant Human TNF- α is produced by our Mammalian cell expression system and the target gene encoding Val77-Leu233 is expressed.
Accession #	P01375
Tag	Tag free
Host	Mammalian cell
Species	Human
Predicted MW	17.4 kDa
Form	Lyophilized
Buffer	PBS, 5% mannitol and 0.01% Tween 80, pH 7.4
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Store at $\leq -70^{\circ}\text{C}$, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
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 $\mu\text{g/ml}$. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g/ml}$. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SDS-PAGE image



Bioactivity image



The ED50 for this effect is 5-60 pg/mL.

Background

Alternative Names

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

References

Tumor Necrosis Factor- α (TNF- α) is secreted by macrophages, monocytes, neutrophils, T-cells, and NK-cells following stimulation by bacterial LPS. Cells expressing CD4 secrete TNF- α while cells that express CD8 secrete little or no TNF- α . Synthesis of TNF- α can be induced by many different stimuli including interferons, IL2, and GM-CSF. The clinical use of the potent anti-tumor activity of TNF- α has been limited by the proinflammatory side effects such as fever, dose-limiting hypotension, hepatotoxicity, intravascular thrombosis, and hemorrhage. Designing clinically applicable TNF- α mutants with low systemic toxicity has been of intense pharmacological interest. Human TNF- α that binds to murine TNF-R55 but not murine TNF-R7, exhibits retained anti-

Product Name: GMP Recombinant Human TNF- α
Catalog#: PCH90043



tumor activity and reduced systemic toxicity in mice compared with murine TNF- α , which binds to both murine TNF receptors. Based on these results, many TNF- α 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- α 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.

Note

For research use only .