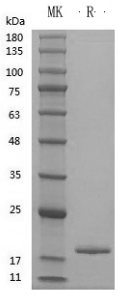
Product Name: Recombinant Human TNF-α
Catalog #: PCH2540

Summary

Name	TNF-α
Purity	Greater than 98% 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
Host	Human Cells
Species	Human
Predicted Molecular Mass	17.4 kDa
Formulation	Lyophilized From PBS, 5% mannitol and 0.01% Tween 80, pH 7.4
Shipping	The product is shipped on dry ice/polar packs.Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at ≤-70°C, stable for 6 months after receipt.Store at ≤-70°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 100μg/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 100μg/ml.Dissolve the lyophilized protein in distilled water.Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SDS-PAGE image



Background

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Alternative Names	umor Necrosis Factor; Cachectin; TNF-Alpha; Tumor Necrosis Factor Ligand Superfamily Member 2; TNF-a; TNF; TNFA; TNFSF2
Background	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-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 subsitution 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 , Not for Diagnostic Use.