ELK Biotechnology

Recombinant Human TNF alpha (N-6His)

Catalog #	EPT202
Expression Host	E.coli
DESCRIPTION	Recombinant Human Tumor Necrosis Factor Alpha is produced by our E.coli expression system and the target gene encoding Gly57-Leu233 is expressed with a 6His tag at the N-terminus.
Accession	P01375
Synonyms	Tumor Necrosis Factor; Cachectin; TNF-Alpha; Tumor Necrosis Factor Ligand Superfamily Member 2; TNF-a; TNF; TNFA; TNFSF2
Mol Mass	21.8 KDa
AP Mol Mass	18 KDa, reducing conditions
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
FORMULATION	Lyophilized from a 0.2 μm filtered solution of 20mM

PB, 100mM NaCl, pH 8.0.

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.

SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

STORAGE

Lyophilized protein should be stored at < -20 ° C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days.

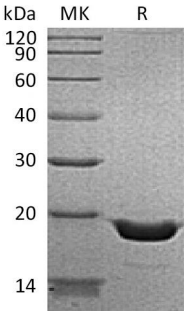
Aliquots of reconstituted samples are stable at < -20° C for 3 months.

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.

ELK Biotechnology



SDS-PAGE

+86-27-59760950 ELKbio@ELKbiotech.com www.elkbiotech.com

23-2, No.388 Gaoxin 2nd Road,Wuhan East Lake Hi-tech Development Zone, Hubei , P.R.C