

Recombinant Human TNF-alpha Protein

Catalog No.: RP00993 Recombinant 4 Publications

Sequence Information

Species **Gene ID** **Swiss Prot**
 Human 7124 P01375

Tags

C-His

Synonyms

TNF; DIF; TNF-alpha; TNFA; TNFSF2;
 TNLG1F; tumor necrosis factor;TNF-
 α;DIF;TNF-
 alpha;TNFA;TNFSF2;TNLG1F;TNF alpha

Product Information

Source **Purification**
 HEK293 cells ≥ 95 % as
 determined by SDS-
 PAGE.

Calculated MW **Observed MW**
 18.19 kDa 18 kDa

Endotoxin

< 0.1 EU/μg of the protein by LAL
 method.

Formulation

Lyophilized from a 0.22 μm filtered
 solution of PBS, pH 7.4. Contact us for
 customized product form or formulation.

Reconstitution

Centrifuge the vial before opening.
 Reconstitute to a concentration of
 0.1-0.5 mg/mL in sterile distilled water.
 Avoid vortex or vigorously pipetting
 the protein. For long term storage, it is
 recommended to add a carrier protein or
 stabilizer (e.g. 0.1% BSA, 5% HSA, 10%
 FBS or 5% Trehalose), and aliquot the
 reconstituted protein solution to
 minimize freeze/thaw cycles.

Background

Tumor necrosis factor alpha (TNF-alpha), also known as TNF, TNFA or TNFSF2, is the prototypic cytokine of the TNF superfamily. This cytokine is mainly secreted by macrophages. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFRB. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, and cancer. Knockout studies in mice also suggested the neuroprotective function of this cytokine.

Basic Information

Description

Recombinant Human TNF-alpha Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Val 77 - Leu 233) of human TNF-alpha (Accession #NP_000585.2) fused with a 6×His tag at the C-terminus.

Bio-Activity

Recombinant Human TNF-alpha induces cytotoxicity in the L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The ED₅₀ for this effect is 0.90-3.60 ng/mL, corresponding to a specific activity of 2.78×10⁵~1.11×10⁶units/mg.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.
 After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.
 Avoid repeated freeze/thaw cycles.

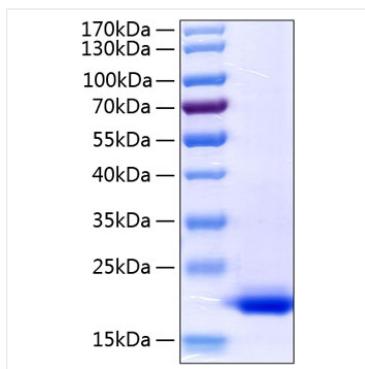
Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

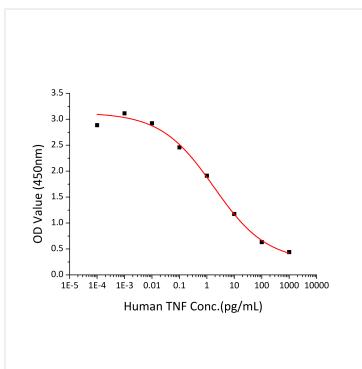
Contact

	400-999-6126
	cn.market@abclonal.com.cn
	www.abclonal.com.cn

Validation Data



Recombinant Human TNF-alpha Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



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