

# Recombinant Mouse TNF-alpha/TNF Protein

Catalog No.: RP01702 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Mouse	21926	P06804

### Tags

NO-tag

### Synonyms

DIF; Tnfa; TNF-a; TNFSF2; Tnlg1f;  
Tnfsf1a; TNFalpha; TNF-alpha;TNF

## Product Information

Source	Purification
HEK293 cells	> 92% by SDS-PAGE.

### Endotoxin

&lt;0.1EU/μg

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

### 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.

## Contact

 | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn) | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Background

Tumor necrosis factor alpha (TNF-alpha), also known as TNF, TNFA or TNFSF2, is the prototypic cytokine of the TNF superfamily, and is a multifunctional molecule involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. Two receptors, TNF-R1 (TNF receptor type 1; CD120a; p55/60) and TNF-R2 (TNF receptor type 2; CD120b; p75/80), bind to TNF-alpha. TNF-alpha protein is produced mainly by macrophages, and large amounts of this cytokine are released in response to lipopolysaccharide, other bacterial products, and Interleukin-1 (IL-1). TNF-alpha is involved in fighting against the tumorigenesis, thus, is regarded as a molecular insight in cancer treatment.

## Basic Information

### Description

Recombinant Mouse TNF-alpha/TNF Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Leu80-Leu235) of mouse TNF-alpha/TNF (Accession #NP\_038721.1.) fused with no additional amino acid.

### Bio-Activity

Recombinant Mouse TNF-alpha induces cytotoxicity in the L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The ED<sub>50</sub> for this effect is typically 29-116 pg/mL, corresponding to a specific activity of 8.62×10<sup>6</sup>-3.45×10<sup>7</sup> units/mg.

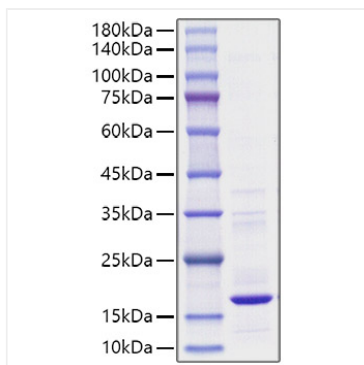
### Storage

Store the lyophilized protein at -20°C to -80°C for 12 months.

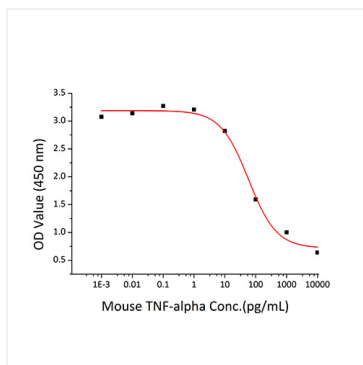
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

## Validation Data



Recombinant Mouse TNF-alpha/TNF Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 17 kDa.



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