

RP01071

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# Recombinant Mouse TNF-alpha Protein

Catalog No.: RP01071 **Recombinant** **2 Publications**

## Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	21926	P06804

### Tags

C-His

### Synonyms

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

## Product Information

Source	Purification
HEK293 cells	> 87% by SDS-PAGE.

### 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 free-thaw cycles.

## Contact



[www.abclonal.com](http://www.abclonal.com)

## Background

### Basic Information

#### Description

Recombinant Mouse TNF-alpha Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Leu80-Leu235) of mouse TNF-alpha (Accession #NP\_038721.1) fused with a 6×His tag at the C-terminus.

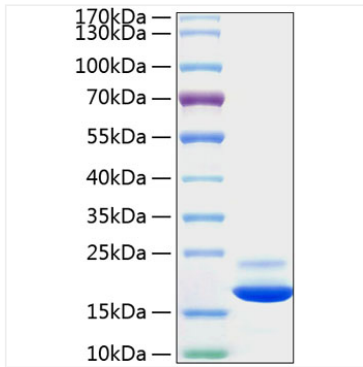
#### Bio-Activity

1. Immobilized recombinant Mouse TNFα at 2 µg/mL (100 µL/well) can bind Human TNFRSF1A with a linear range of 4-53 ng/mL. | 2. Immobilized Recombinant Mouse TNF-α at 2 µg/mL (100 µL/well) can bind Mouse TNFRSF1B with a linear range of 0.02-0.77 ng/mL. | 3. Recombinant Mouse TNF-alpha induces cytotoxicity in the L-929 mouse fibroblast cell line in the presence of the metabolic inhibitor actinomycin D. The ED50 for this effect is typically 3.55-14.2 pg/mL, corresponding to a specific activity of 7.04×10<sup>7</sup>~2.82×10<sup>8</sup> units/mg.

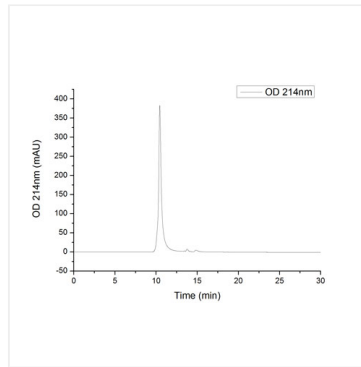
#### Storage

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.

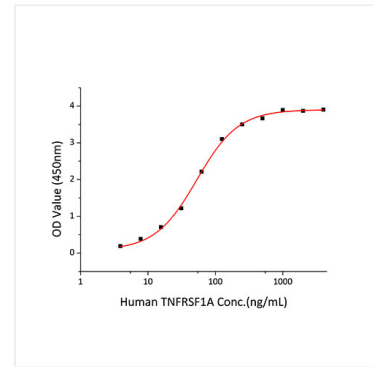
## Validation Data



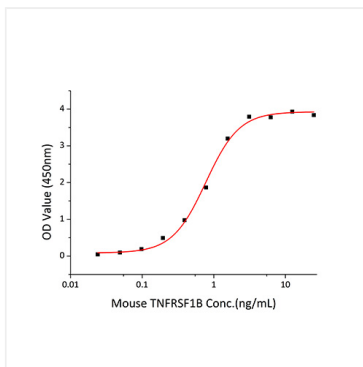
Recombinant Mouse TNF-alpha Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



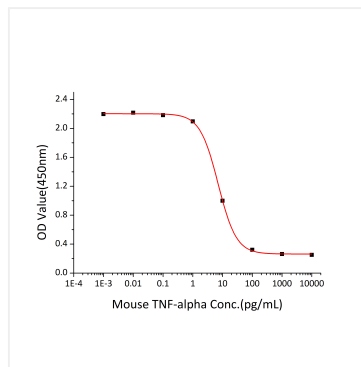
The purity of Mouse TNF-alpha Protein (Cat.RP01071) was greater than 95% as determined by SEC-HPLC.



Immobilized recombinant Mouse TNF $\alpha$  at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human TNFRSF1A with a linear range of 4-53 ng/mL.



Immobilized Recombinant Mouse TNF- $\alpha$  at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Mouse TNFRSF1B with a linear range of 0.02-0.77 ng/mL.



Recombinant Mouse TNF-alpha induces cytotoxicity in the L-929 mouse fibroblast cell line in the presence of the metabolic inhibitor actinomycin D. The ED<sub>50</sub> for this effect is typically 3.55-14.2 pg/mL, corresponding to a specific activity of  $7.04 \times 10^7 \sim 2.82 \times 10^8$  units/mg.