

Datasheet for ABIN6700748

## TNF alpha Protein



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### Overview

Quantity:	20 µg
Target:	TNF alpha
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

### Product Details

Purpose:	TNF-α Mouse Recombinant Protein
Purification:	Purity was determined to be greater than 98% by analysis by RP-HPLC and by reducing and non-reducing SDS- PAGE.
Purity:	98,00%
Endotoxin Level:	Measured by LAL is 0.04 EU/µg protein (with 50% confidence range).
Biological Activity Comment:	Recombinant Mouse TNFα is fully biologically active when compared to standard. The ED50 as determined by the cytotoxicity of mouse L929 cells in the presence of Actinomycin D is 13-20 pg/mL.

### Target Details

Target:	TNF alpha
Alternative Name:	Tnf ( <a href="#">TNF alpha Products</a> )
Background:	Synonyms: Tumor necrosis factor, TNF-alpha, TNF-a, TNFα, cytokine, Tumor necrosis factor

## Target Details

ligand superfamily member 2, Cachectin

Background: Tumor Necrosis Factor-alpha (TNF-a) is pleiotrophic cytokine secreted by macrophages, monocytes, neutrophils, T-cells, NK-cells following stimulation by bacterial LPS .

TNF-a activity is mediated via interactions with TNFR1 & TNFR2 receptors. The synthesis of TNF-alpha is induced by many different stimuli including interferons, IL-2 & GM-CSF.

Recombinant mouse TNF-a produced in E.Coli is a non-glycosylated polypeptide chain containing 156 amino acids and having a molecular mass of 17,300 daltons.

UniProt: [P06804](#)

Pathways: [NF-kappaB Signaling](#), [Apoptosis](#), [Caspase Cascade in Apoptosis](#), [TLR Signaling](#), [Cellular Response to Molecule of Bacterial Origin](#), [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#), [Production of Molecular Mediator of Immune Response](#), [Positive Regulation of Endopeptidase Activity](#), [Hepatitis C](#), [Protein targeting to Nucleus](#), [Inflammasome](#)

## Application Details

Application Notes: Other: User Optimized  
Application\_Note: TNF $\alpha$  protein has been tested by SDS-PAGE and is suitable as a control for polyclonal or monoclonal anti-TNF $\alpha$  in immunological assays.

Comment: Suggested\_Applications: Cellular Assay  
Other\_Performance\_Data:

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Reconstitution\_Buffer: Restore with deionized water (or equivalent)  
Reconstitution\_Volume: 20  $\mu$ L (20-200  $\mu$ L)

Concentration: 0.1 mg/mL

Buffer: Buffer: 0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2  
Stabilizer: None

Preservative: Without preservative

Storage: -20  $^{\circ}$ C

Handling

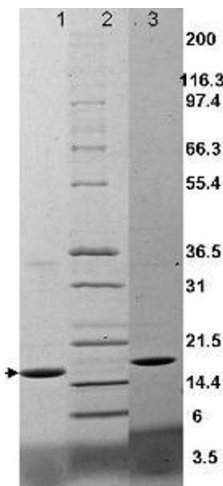
Storage Comment: Store vial at -20° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL) . For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.

Expiry Date: 6 months

Publications

Product cited in: Sun, Yau, Wong, Li, Huang, Yao: "Role of TRPM2 in H(2)O(2)-induced cell apoptosis in endothelial cells." in: **PloS one**, Vol. 7, Issue 8, pp. e43186, (2013) ([PubMed](#)).

Images



**SDS-PAGE**

**Image 1.** TNF-a Mouse Cytokine - SDS-PAGE. SDS-PAGE shows bands corresponding to TNF-a (1µg) in lane 1 (unreduced, arrowhead) and lane 3 (reduced). Molecular weight estimation was made by comparison to prestained MW markers, lane 2.