

Datasheet for ABIN6700749

TNF alpha Protein**2** Images[Go to Product page](#)

Overview

Quantity:	10 µg
Target:	TNF alpha
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	Human Tumor Necrosis Factor alpha Recombinant Protein (Animal Free)
Purification:	Tumor Necrosis Factor alpha is produced with no animal-derived raw products, animal free equipment and animal free protocols. Purity was determined to be greater than 96% as determined by reducing and non-reducing SDS-PAGE.
Purity:	96,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity is determined by the cytolysis of mouse L929 cells in the presence of Actinomycin D and is typically less than 0.05 ng/mL.

Target Details

Target:	TNF alpha
Alternative Name:	TNF (TNF alpha Products)
Background:	Synonyms: TNFSF2, Cachectin, DIF, Necrosin, Cytotoxin, Cachexin, TNF-alpha, Tumor necrosis

Target Details

factor ligand superfamily member 2

Background: Tumor Necrosis Factor alpha (TNF α) is an inflammatory cytokine secreted by macrophages, monocytes, neutrophils, T cells, NK-cells following their stimulation by bacterial LPS. TNF α activates signals through two receptors, TNFR1, which is expressed on most cell types, and TNFR2, which is expressed mainly on immune cells. TNF α can have many functions including, to stimulate of phagocytosis in macrophages, to chemoattract neutrophils, to increase insulin resistance and to induce fever. Recombinant human TNF- α is a non-glycosylated protein, containing 158 amino acids, with a molecular weight of 17.5 kDa.

UniProt: [P01375](#)

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: Tumor Necrosis Factor alpha Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Tumor Necrosis Factor 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: 10 μ L (10-100 μ L)

Concentration: 0.1 mg/mL

Buffer: Buffer: 0.01 M Sodium Phosphate, pH 7.5
Stabilizer: None

Preservative: Without preservative

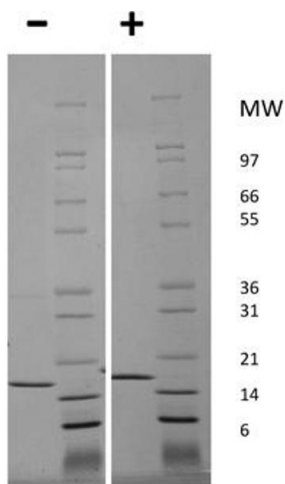
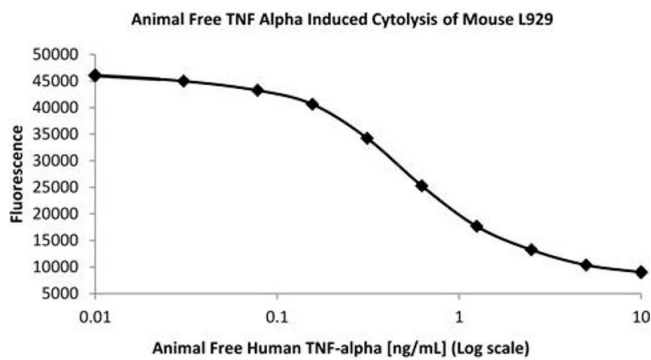
Handling

Storage: -20 °C

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

Images



SDS-PAGE

Image 1. SDS-PAGE of Human Tumor Necrosis Factor alpha Recombinant Protein (Animal Free) Bioactivity of Human Tumor Necrosis Factor alpha Animal Free Recombinant Protein. Serial dilutions of Human TNF alpha AF, starting at 10 ng/mL, were added to 929 cells growing in the presence of 1 ug/mL actinomycin D. Cell viability was measure after 48 hours and the linear portion of the curve was us used to calculate the ED50. The ED50 of Human AF TNFn alpha AF is between 0.4-0.6 ng/mL.

SDS-PAGE

Image 2. SDS-PAGE of Human Tumor Necrosis Factor alpha Recombinant Protein (Animal Free) SDS-PAGE of Human Tumor Necrosis Factor alpha Animal Free Recombinant Protein. Lane 1: 1 µg Human TNF alpha AF in non-reducing conditions . Lane 2: Molecular weight marker. Lane 3: 1 µg Human TNF alpha AF in reducing conditions (+). Lane 4: Molecular weight marker. Human TNF alpha AF has a predicted MW of 17.5 kDa.