

Datasheet for ABIN935842
TNF alpha Protein (full length)



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1 Publication

Overview

Quantity:	1 mg
Target:	TNF alpha
Protein Characteristics:	full length
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Characteristics:	Purified recombinant Human TNF alpha protein Expression System: E.coli Bioactivity: The ED50 as determined by the cytolysis of murine L929 cells in the presence of Actinomycin D is
Purification:	Proprietary chromatographic technique
Purity:	> 98 % pure

Target Details

Target:	TNF alpha
Alternative Name:	TNF alpha (TNF alpha Products)
Background:	Tumor necrosis factor is a cytokine involved in systemic inflammation and is a member of a group of cytokines that all stimulate the acute phase reaction. TNF is mainly secreted by

Target Details

macrophages. TNF causes apoptotic cell death, cellular proliferation, differentiation, inflammation, tumorigenesis and viral replication, TNF is also involved in lipid metabolism, and coagulation. TNF's primary role is in the regulation of immune cells. Dysregulation and, in particular, overproduction of TNF have been implicated in a variety of human diseases- autoimmune diseases, insulin resistance, and cancer.

Alternative Names: Tumor Necrosis Factor protein, TNFa protein, Cytotoxin protein, DIF protein, TNFSF2 protein, TNF-alpha protein, TNF-a protein, Differentiation-inducing factor protein, Necrosin protein, Cachectin protein

Molecular Weight: 17,483 Da

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: Each Investigator should determine their own optimal working dilution for specific applications.

Assay Procedure: Protein quantitation was carried out by two independent methods 1. UV spectroscopy at 280 nm using the absorbency value of 1.234 as the extinction coefficient for a 0.1 % (1 mg/mL) solution.
2. Analysis by RP-HPLC, using a calibrated solution of TNF-a as a Reference Standard.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstitute in water to a concentration of 0.1 - 1.0 g/mL.

Buffer: Lyophilized from 20 mM PBS, pH 7.2, with 10 mM NaCl.

Handling Advice: Avoid repeated freeze/thaw cycles.

Storage: 4 °C/-20 °C

Storage Comment: Store at 4 °C until reconstitution. Following reconstitution aliquot and freeze at -20 °C for long term storage.

Publications

Product cited in: Spatz, Eibl, Hink, Wolf, Fischer, Mayr, Schernthaner, Eibl: "Impaired primary immune response in type-1 diabetes. Functional impairment at the level of APCs and T-cells." in: **Cellular immunology**, Vol. 221, Issue 1, pp. 15-26, (2003) ([PubMed](#)).