

Datasheet for ABIN6719738

TNF alpha ELISA Kit

Image



Overview

Quantity:	1 kit
Target:	TNF alpha
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	15.6 pg/mL - 1000 pg/mL
Minimum Detection Limit:	15.6 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich ELISA for Quantitative Detection of Antigen	
Sample Type:	Cell Culture Supernatant, Plasma (EDTA - heparin - citrate), Serum	
Analytical Method:	Quantitative	
Detection Method:	Colorimetric	
Characteristics:	Synonyms: APC1 protein, Cachectin, DIF, soluble form, Tnf, TNF a, TNF alpha, TNF macrophage	
	derived, TNF monocyte derived, TNF superfamily member 2, TNF-a, TNF-alpha, TNFA_HUMAN,	
	TNFSF2, Tumor necrosis factor, Tumor necrosis factor alpha, Tumor necrosis factor ligand	
	superfamily member 2	
	Background: Tumor necrosis factor-alpha(TNF-alpha, or TNF) is secreted by macrophages in	
	response to inflammation, infection and cancer. Human Tumor Necrosis Factor(TNF) and	
	Lymphotoxin(TNF-beta) are cytotoxic proteins which have similar biological activities and share	

30 % amino acid homology. TNF-alpha is produced by monocytes, which can stimulate

endothelial cells to produce the multilineage growth factor granulocyte-macrophage colony-stimulating factor and extend the role of this immunoregulatory protein to the regulation of hematopoiesis in vitro. TNF is a soluble protein that causes damage to tumor cells but has no effect on normal cells. Human TNF has been purified to apparent homogeneity as a 17.3-kilodalton protein from HL-60 leukemia cells and has showed cytotoxic and cytostatic activities against various human tumor cell lines. The human TNF cDNA is 1585 base pairs in length and encodes a protein of 233 amino acids. The mature protein begins at residue 77, leaving a long leader sequence of 76 amino acids. TNF-alpha has been mapped to human chromosome 6.

Production: Natural and recombinant human TNF alpha. There is no detectable cross-reactivity with other relevant proteins.

Standard: Expression system for standard: E.coli, Immunogen sequence: V77-L233

Target Details

Target:	TNF alpha	
Alternative Name:	TNF alpha (TNF alpha Products)	
Gene ID:	7124	
NCBI Accession:	NP_000585	
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:

Application Note: Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1 mL per well of the 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL, 15.6pg/mL human TNF alpha standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum or plasma(heparin, EDTA, citrate) to each empty well. It is recommended that each human TNF alpha standard solution and each sample be measured in duplicate.

Application Details

	Blood Product Anticoagulant: Heparin Sodium
	ELISA Dilution: 15.6pg/mL-1000pg/mL(cellculturesupernates),7.8pg/mL-
	500pg/mL(serum,plasma)
Sample Volume:	100 μL
Plate:	Pre-coated
Restrictions:	For Research Use only

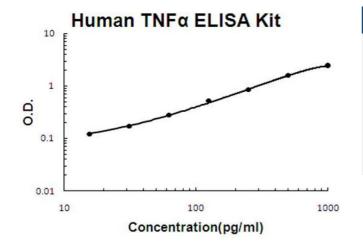
Handling

Storage:	RT,4 °C,-20 °C	
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Storage Comment:

Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.

Images



ELISA

Image 1. Human TNF alpha Accusignal ELISA Kit Human TNF alpha AccuSignal ELISA Kit standard curve. Assay Range: 15.6pg/ml-

1000pg/ml(cellculturesupernates),7.8pg/ml-

500pg/ml(serum,plasma). Sensitivity: <1pg/ml.