

Human TNF- α Antibody Pair Set

Catalog No.	E-KAB-0006	Applications	ELISA
Synonyms	DIF, TNF-alpha, TNFA, TNFSF2		

Kit components & Storage

Title	Specifications	Storage
Human TNF- α Capture Antibody	1 vial, 100 μ g	Store at -20°C for one year. Avoid freeze / thaw cycles.
Human TNF- α Detection Antibody (Biotin)	1 vial, 50 μ L	Store at -20°C for one year. Avoid freeze / thaw cycles.

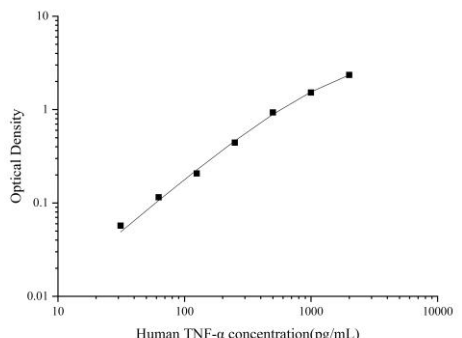
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0006)	
		Human TNF- α Capture Antibody	Human TNF- α Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human TNF- α protein	Recombinant Human TNF- α protein
	Swissprot	P01375	
Product details	Reactivity	Human	Human
	Host	Mouse	Mouse
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4
	Purify	Protein A or G	Protein A or G
	Specificity	Detects Human TNF- α in ELISAs.	

Applications

Human TNF- α Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images										
ELISA Capture	0.5-4 μ g/mL	Human TNF- α Capture Antibody	 <p>The graph is a log-log plot of Optical Density versus Human TNF-α concentration (pg/mL). The y-axis (Optical Density) ranges from 0.01 to 10, and the x-axis (Human TNF-α concentration) ranges from 10 to 10000. The data points form a straight line, indicating a linear relationship on this scale.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human TNF-α concentration (pg/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr><td>10</td><td>0.05</td></tr> <tr><td>100</td><td>0.2</td></tr> <tr><td>1000</td><td>0.8</td></tr> <tr><td>10000</td><td>3.0</td></tr> </tbody> </table>	Human TNF- α concentration (pg/mL)	Optical Density	10	0.05	100	0.2	1000	0.8	10000	3.0
Human TNF- α concentration (pg/mL)	Optical Density												
10	0.05												
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ELISA Detection	1:1000-1:10000	Human TNF- α Detection Antibody (Biotin)											

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

TNF, as also known as TNF-alpha, or cachectin, is a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. It is expressed as a 26 kDa membrane bound protein and is then cleaved by TNF-alpha converting enzyme (TACE) to release the soluble 17 kDa monomer, which forms homotrimers in circulation. It is produced chiefly by activated macrophages, although it can be produced by many other cell types such as CD4+ lymphocytes, NK cells, neutrophils, mast cells, eosinophils, and neurons. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFR2. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, and cancer.