

Rat TNF- α Antibody Pair Set

Catalog No.	E-KAB-0113	Applications	ELISA
Synonyms	DIF, TNF-alpha, TNFA, TNFSF2		

Kit components & Storage

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

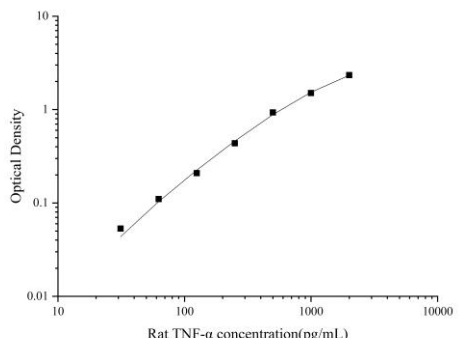
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0113)	
		Rat TNF- α Capture Antibody	Rat TNF- α Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Rat TNF- α protein	Recombinant Rat TNF- α protein
	Swissprot	P16599	
Product details	Reactivity	Rat	Rat
	Host	Mouse	Goat
	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	Antigen Affinity
	Specificity	Detects Rat TNF- α in ELISAs.	

Applications

Rat TNF- α Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images										
ELISA Capture	0.5-4 μ g/mL	Rat TNF- α Capture Antibody	 <p>The graph displays a standard curve for the Rat TNF-α Sandwich ELISA Assay. The x-axis represents the concentration of Rat TNF-α in pg/mL, ranging from 10 to 10,000 on a logarithmic scale. The y-axis represents the Optical Density, ranging from 0.01 to 10 on a logarithmic scale. The data points show a clear positive linear relationship on this log-log scale, indicating a wide dynamic range for the assay.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Rat 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>1.0</td> </tr> <tr> <td>10000</td> <td>5.0</td> </tr> </tbody> </table>	Rat TNF- α concentration (pg/mL)	Optical Density	10	0.05	100	0.2	1000	1.0	10000	5.0
Rat TNF- α concentration (pg/mL)	Optical Density												
10	0.05												
100	0.2												
1000	1.0												
10000	5.0												
ELISA Detection	1:1000-1:10000	Rat TNF- α Detection Antibody (Biotin)											

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

Background

This gene encodes a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages. 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. Knockout studies in mice also suggested the neuroprotective function of this cytokine.