

## Rat TNF- $\alpha$ Antibody Pair Set

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

### Kit components & Storage

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

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

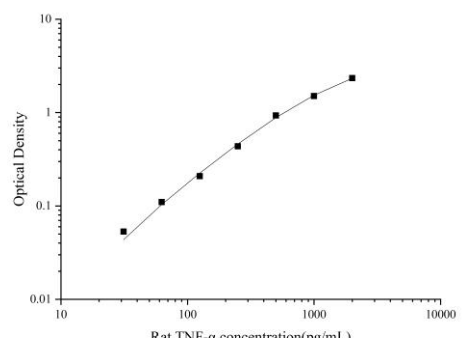
### Product Information

Items		Characteristic (E-KAB-0113)	
		Rat TNF- $\alpha$ Capture Antibody	Rat TNF- $\alpha$ Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Rat TNF- $\alpha$ protein	Recombinant Rat TNF- $\alpha$ 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- $\alpha$ in ELISAs.	

### For Research Use Only

## Applications

### Rat TNF- $\alpha$ Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																		
ELISA Capture	0.5-4μg/mL	Rat TNF-α Capture Antibody	 <table><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>20</td><td>0.1</td></tr><tr><td>50</td><td>0.2</td></tr><tr><td>100</td><td>0.4</td></tr><tr><td>200</td><td>0.8</td></tr><tr><td>500</td><td>1.5</td></tr><tr><td>1000</td><td>2.5</td></tr><tr><td>2000</td><td>4.0</td></tr></tbody></table>	Rat TNF-α concentration (pg/mL)	Optical Density	10	0.05	20	0.1	50	0.2	100	0.4	200	0.8	500	1.5	1000	2.5	2000	4.0
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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.

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