



Rat TNF- α ELISA kit

Product Code	CSB-E11987r
Abbreviation	TNF
Target Name	tumor necrosis factor (TNF superfamily, member 2)
Uniprot No.	P16599
Alias	DADB-70P7.1, DIF, TNF-alpha, TNFA, TNFSF2, APC1 protein TNF superfamily, member 2 TNF, macrophage-derived TNF, monocyte-derived cachectin tumor necrosis factor alpha
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, cell culture supernates, tissue homogenates
Detection Range	6.25 pg/mL-400 pg/mL
Sensitivity	1.56 pg/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Immunology
Gene Names	Tnf
Tag Info	quantitative
Protein Description	Sandwich
Description	<p>This Rat TNF ELISA Kit was designed for the quantitative measurement of Rat TNF protein in serum, plasma, cell culture supernates, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 6.25 pg/mL-400 pg/mL and the sensitivity is 1.56 pg/mL .</p>
Target Details	<p>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/TNFR. 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.</p>
Product Precision	Intra-assay Precision (Precision within an assay): CV%<8%



Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of rat TNF- α in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	90
	Range %	87-96
1:2	Average %	99
	Range %	95-104
1:4	Average %	101
	Range %	97-105
1:8	Average %	98
	Range %	93-107

Recovery

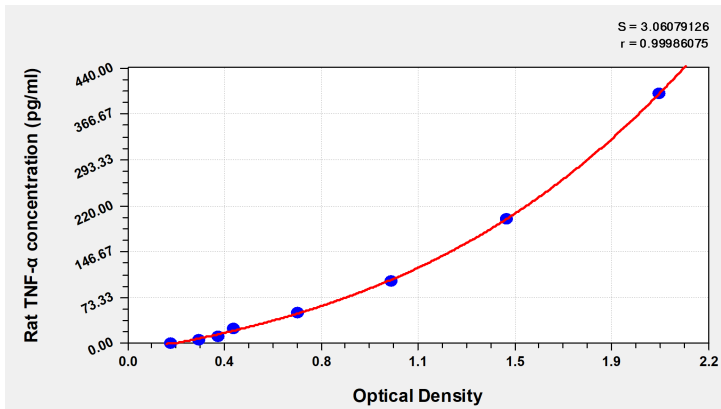
The recovery of rat TNF- α spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

	Sample Type	Average % Recovery	Range
Serum (n=5)	85	80-92	
EDTA plasma (n=4)	99	95-104	

Typical



These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



pg/ml	OD1	OD2	Average	Corrected
400	2.037	2.067	2.052	1.871
200	1.445	1.489	1.467	1.286
100	1.017	1.034	1.026	0.845
50	0.655	0.677	0.666	0.485
25	0.411	0.438	0.425	0.244
12.5	0.351	0.378	0.365	0.184
6.25	0.297	0.282	0.290	0.109
0	0.183	0.179	0.181	?

Msds

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