



# Rat Tumor necrosis factor soluble receptor ? ,TNFsR-? ELISA KIT

<b>Product Code</b>	CSB-E07381r
<b>Abbreviation</b>	TNFsR1
<b>Protein Biological Process 1</b>	Apoptosis/Autophagy
<b>Target Name</b>	Tumor necrosis factor soluble receptor ? ,TNFsR-
<b>Uniprot No.</b>	P22934
<b>Alias</b>	CD120a, FPF, MGC19588, TBP1, TNF-R, TNF-R-I, TNF-R55, TNFAR, TNFR1, TNFR55, TNFR60, p55, p55-R, p60, tumor necrosis factor binding protein 1 tumor necrosis factor receptor 1, TNFsR-1
<b>Product Type</b>	ELISA Kit
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Protein Biological Process 3</b>	Apoptosis
<b>Sample Types</b>	serum, plasma, tissue homogenates
<b>Detection Range</b>	15.6 pg/mL-1000 pg/mL
<b>Sensitivity</b>	3.9 pg/mL
<b>Assay Time</b>	1-5h
<b>Sample Volume</b>	50-100ul
<b>Detection Wavelength</b>	450 nm
<b>Lead Time</b>	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
<b>Research Area</b>	Cell Biology
<b>Gene Names</b>	Tnfrsf1a
<b>Tag Info</b>	quantitative
<b>Protein Description</b>	Sandwich

## Description

The Rat Tumor necrosis factor soluble receptor ? (TNFsR-?) ELISA Kit – a powerful tool for quantitative analysis of the Tumor necrosis factor receptor 1 protein in rat samples.

This ELISA kit is specifically designed for the measurement of TNFsR-? protein levels in a variety of sample types, including serum, plasma, and tissue homogenates from Rattus norvegicus (Rat) species. With a detection range of 15.6 pg/mL to 1000 pg/mL and a sensitivity of 3.9 pg/mL, this ELISA kit can accurately detect even low levels of TNFsR-? protein.



The assay principle is based on a sandwich immunoassay, which involves the use of two specific antibodies that bind to different epitopes of the target protein. This approach ensures high specificity and sensitivity in the measurement of TNFsR-? levels. The assay can be completed in just 1-5 hours, with a sample volume of 50-100ul, making it a fast and convenient option for research. This TNFsR-? ELISA kit has been cited in over 2 research articles, demonstrating its reliability and accuracy.

## Target Details

This protein is a member of the TNF-receptor superfamily. This protein is one of the major receptors for the tumor necrosis factor-alpha. This receptor can activate NF-kappaB, mediate apoptosis, and function as a regulator of inflammation. Antiapoptotic protein BCL2-associated athanogene 4 (BAG4/SODD) and adaptor proteins TRADD and TRAF2 have been shown to interact with this receptor, and thus play regulatory roles in the signal transduction mediated by the receptor. Germline mutations of the extracellular domains of this receptor were found to be associated with the autosomal dominant periodic fever syndrome. The impaired receptor clearance is thought to be a mechanism of the disease.

## 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 TNFsR-? 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 %	104
	Range %	100-110
1:2	Average %	92
	Range %	88-96
1:4	Average %	98
	Range %	94-102
1:8	Average %	90
	Range %	85-94

## Recovery

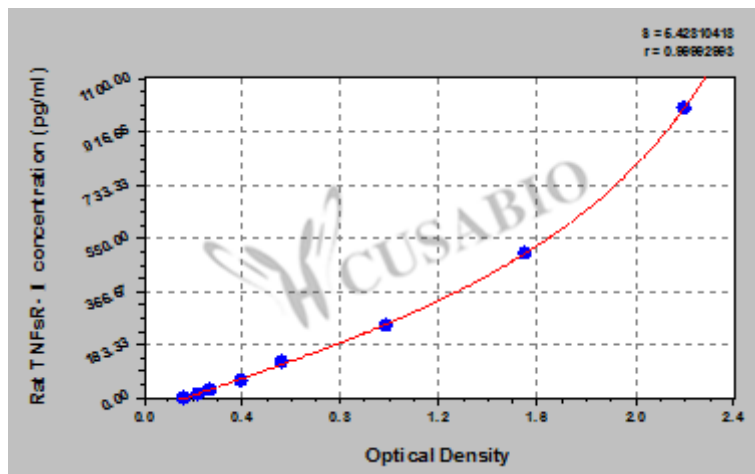
The recovery of rat TNFsR-? spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	87	82-93
EDTA plasma (n=4)	95	90-100



## 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
1000	2.107	2.221	2.164	1.987
500	1.562	1.499	1.531	1.354
250	0.952	1.003	0.978	0.801
125	0.573	0.558	0.566	0.389
62.5	0.395	0.412	0.404	0.227
31.2	0.284	0.275	0.280	0.103
15.6	0.229	0.234	0.232	0.055
0	0.181	0.173	0.177	?

## Msds

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