

Datasheet for ABIN2859279

TNFRSF1A ELISA Kit





Overview

Quantity:	96 tests
Target:	TNFRSF1A
Binding Specificity:	AA 30-212
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	15.6-1000 pg/mL
Minimum Detection Limit:	15.6 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse TNFR1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO
	Immunogen sequence: L30-A212
Specificity:	NSO, L30-A212
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<10pg/mL

Product Details

Material not included:

Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g Nacl

Target Details

Target:	TNFRSF1A
Alternative Name:	TNFRSF1A (TNFRSF1A Products)
Background:	Protein Function: Receptor for TNFSF2/TNF-alpha and homotrimeric TNFSF1/lymphotoxin-
	alpha. The adapter molecule FADD recruits caspase-8 to the activated receptor. The resulting
	death-inducing signaling complex (DISC) performs caspase-8 proteolytic activation which
	initiates the subsequent cascade of caspases (aspartate-specific cysteine proteases)
	mediating apoptosis (By similarity)
	Background: Tumor necrosis factor receptor 1 (TNFR1), also known as tumor necrosis factor
	receptor superfamily member 1A (TNFRSF1A) and CD120a, is a ubiquitous membrane receptor
	that binds tumor necrosis factor-alpha (TNF alpha). The protein encoded by this gene is a
	member of the tumor necrosis factor receptor superfamily, which also contains TNFRSF1B.
	And this protein is one of the major receptors for the tumor necrosis factor-alpha. This receptor
	can activate the transcription factor NF-i°B, 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.
	Synonyms: Tumor necrosis factor receptor superfamily member 1A, Tumor necrosis factor
	receptor 1,TNF-R1,Tumor necrosis factor receptor type I,TNF-RI,TNFR-
	I,p55,p60,CD120a,Tnfrsf1a,Tnfr-1, Tnfr1,
	Full Gene Name: Tumor necrosis factor receptor superfamily member 1A
	Cellular Localisation: Cell membrane, Single-pass type I membrane protein. Golgi apparatus
	membrane, Single-pass type I membrane protein.
Gene ID:	21937
UniProt:	P25118
Pathways:	NF-kappaB Signaling, Apoptosis, Caspase Cascade in Apoptosis, Hepatitis C, Ubiquitin Proteasome Pathway

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well
	assay was recommended for both standard and sample testing.
Plate:	Pre-coated
Protocol:	mouse TNFR1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent
	assay technology. A monoclonal antibody from rat specific for TNFR1 has been precoated ont
	96-well plates. Standards (NSO, L30-A212) and test samples are added to the wells, a
	biotinylated detection polyclonal antibody from goat specific for TNFR1 is added subsequently
	and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was
	added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate
	TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a
	blue color product that changed into yellow after adding acidic stop solution. The density of
	yellow is proportional to the mouse TNFR1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL,
	31.2pg/mL, 15.6pg/mL mouse TNFR1 standard solutions into the precoated 96-well plate. Add
	0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each
	properly diluted sample of mouse cell culture supernates or serum to each empty well. See
	"Sample Dilution Guideline" above for details. It is recommended that each mouse TNFR1
	standard solution and each sample be measured in duplicate.
Assay Precision:	Sample 1: n=16, Mean(pg/ml): 46, Standard deviation: 2.7, CV(%): 5.9
	Sample 2: n=16, Mean(pg/ml): 118, Standard deviation: 6.5, CV(%): 5.5
	• Sample 3: n=16, Mean(pg/ml): 581, Standard deviation: 27.5, CV(%): 4.7,
	Sample 1: n=24, Mean(pg/ml): 48.3, Standard deviation: 2.5, CV(%): 5.2 Sample 2: n=24, Mean(pg/ml): 130, Standard deviation: 6, 3)/(%): 5.2
	 Sample 2: n=24, Mean(pg/ml): 120, Standard deviation: 6, CV(%): 5 Sample 3: n=24, Mean(pg/ml): 592, Standard deviation: 33.3, CV(%): 5.6
	Sample 3. 11–24, Mean(pg/1111). 392, Standard deviation. 33.3, 6 v (%). 3.0
Restrictions:	For Research Use only
Handling	
Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

ELISA

Image 1. Mouse TNFR1 PicoKine ELISA Kit standard curve