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Datasheet for ABIN1889448

## TNFSF18 ELISA Kit

### 1 Image

#### Overview

Quantity:	96 tests
Target:	TNFSF18
Binding Specificity:	AA 47-173
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	31.2-2000 pg/mL
Minimum Detection Limit:	31.2 pg/mL
Application:	ELISA

#### Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse TNFSF18/GITRL
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: T47-S173
Specificity:	Expression system for standard: NSO Immunogen sequence: T47-S173
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

## Product Details

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Sensitivity: <10pg/mL

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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

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Target: TNFSF18

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Alternative Name: TNFSF18 ([TNFSF18 Products](#))

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Background: Protein Function: Cytokine that binds to TNFRSF18/AITR/GITR (PubMed:14521928, PubMed:14647196). Regulates T-cell responses (PubMed:14647196). Can function as costimulator and lower the threshold for T-cell activation and T-cell proliferation (PubMed:14608036, PubMed:15128759). Important for interactions between activated T-lymphocytes and endothelial cells. Mediates activation of NF-kappa-B (PubMed:14521928, PubMed:14647196, PubMed:18178614). Triggers increased phosphorylation of STAT1 and up-regulates expression of VCAM1 and ICAM1 (By similarity). Promotes leukocyte adhesion to endothelial cells (PubMed:23892569). Regulates migration of monocytes from the splenic reservoir to sites of inflammation (PubMed:24107315).

Background: Tumor necrosis factor ligand superfamily member 18, also known as AITRL or GITRL, is a protein that in humans is encoded by the TNFSF18 gene. The protein encoded by this gene is a cytokine that belongs to the tumor necrosis factor(TNF) ligand family. It is mapped to 1q25.1. TNFSF18 is a ligand for receptor TNFRSF18/AITR/GITR. It has been shown to modulate T lymphocyte survival in peripheral tissues. This cytokine is also found to be expressed in endothelial cells, and is thought to be important for interaction between T lymphocytes and endothelial cells. TNFSF18-dependent modulation of tryptophan catabolism may represent an important mechanism of action of glucocorticoids, both physiologically and therapeutically.

Synonyms: Tumor necrosis factor ligand superfamily member 18,GITR ligand,GITRL,Glucocorticoid-induced TNF-related ligand,Tnfsf18,Gitrl,

Full Gene Name: Tumor necrosis factor ligand superfamily member 18

Cellular Localisation: Cell membrane, Single-pass type II membrane protein.

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Gene ID: 240873

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UniProt: [Q7TS55](#)

## Application Details

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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.
Comment:	Tissue Specificity: Detected in immature and mature dendritic cells and in macrophages (at protein level). Detected in spleen, lung, heart, thymus, monocytes, macrophages, B-cells and dendritic cells. .
Plate:	Pre-coated
Protocol:	mouse TNFSF18 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for TNFSF18 has been precoated onto 96-well plates. Standards(NSO, T47-S173) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for TNFSF18 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 TNFSF18 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL mouse TNFSF18 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, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse TNFSF18 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none"><li>• Sample 1: n=16, Mean(pg/ml): 183, Standard deviation: 7.7, CV(%): 4.2</li><li>• Sample 2: n=16, Mean(pg/ml): 764, Standard deviation: 35.2, CV(%): 4.6</li><li>• Sample 3: n=16, Mean(pg/ml): 1360, Standard deviation: 51.7, CV(%): 3.8,</li><li>• Sample 1: n=24, Mean(pg/ml): 212, Standard deviation: 12.1, CV(%): 5.7</li><li>• Sample 2: n=24, Mean(pg/ml): 862, Standard deviation: 53.4, CV(%): 6.2</li><li>• Sample 3: n=24, Mean(pg/ml): 1505, Standard deviation: 72.2, CV(%): 4.8</li></ul>
Restrictions:	For Research Use only

## Handling

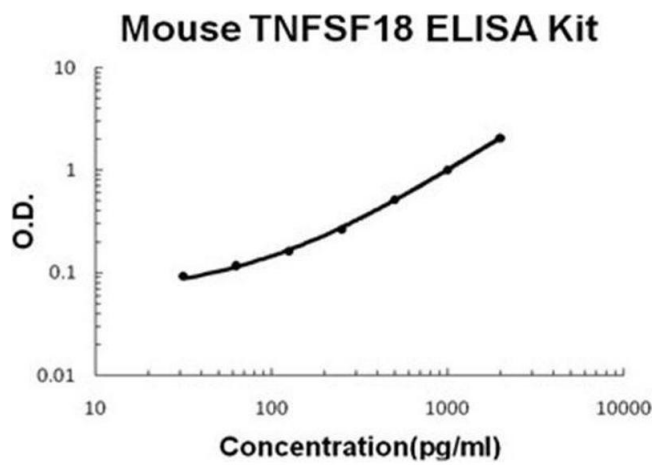
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Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

Handling

Expiry Date: 12 months

Images



#### ELISA

**Image 1.** Mouse TNFSF18/GITRL PicoKine ELISA Kit standard curve