

Datasheet for ABIN1672796
TNFRSF18 ELISA Kit[Go to Product page](#)[1 Image](#)[1 Publication](#)

Overview

Quantity:	96 tests
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Target:	TNFRSF18
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Binding Specificity:	AA 22-153
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Reactivity:	Mouse
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Method Type:	Sandwich ELISA
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Detection Range:	62.5-4000 pg/mL
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Minimum Detection Limit:	62.5 pg/mL
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Application:	ELISA
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Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse TNFRSF18/GITR
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Brand:	PicoKine™
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Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
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Analytical Method:	Quantitative
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Detection Method:	Colorimetric
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Immunogen:	Expression system for standard: NSO Immunogen sequence: S22-H153
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Specificity:	Expression system for standard: NSO Immunogen sequence: S22-H153
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Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
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Product Details

Sensitivity:	<10pg/mL
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:	TNFRSF18
Alternative Name:	TNFRSF18 (TNFRSF18 Products)
Background:	<p>Protein Function: Receptor for TNFSF18. Seems to be involved in interactions between activated T-lymphocytes and endothelial cells and in the regulation of T-cell receptor-mediated cell death. Mediated NF-kappa-B activation via the TRAF2/NIK pathway (By similarity). .</p> <p>Background: Tumor necrosis factor receptor superfamily member 18(TNFRSF18), also called GITR or AITR is a protein that in humans is encoded by the TNFRSF18 gene. This gene is mapped to 1p36.33. This gene encodes a member of the TNF-receptor superfamily. The encoded receptor has been shown to have increased expression upon T-cell activation, and it is thought to play a key role in dominant immunological self-tolerance maintained by CD25(+)CD4(+) regulatory T cells. Knockout studies in mice also suggest the role of this receptor is in the regulation of CD3-driven T-cell activation and programmed cell death. Three alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.</p> <p>Synonyms: Tumor necrosis factor receptor superfamily member 18,Glucocorticoid-induced TNFR-related protein,CD357,Tnfrsf18,Gitr,</p> <p>Full Gene Name: Tumor necrosis factor receptor superfamily member 18</p> <p>Cellular Localisation: Isoform A: Cell membrane, Single-pass type I membrane protein.</p>
Gene ID:	21936
UniProt:	O35714
Pathways:	Cancer Immune Checkpoints

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.
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Application Details

Comment:	Tissue Specificity: Preferentially expressed in activated T lymphocytes.
Plate:	Pre-coated
Protocol:	mouse TNFRSF18 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for TNFRSF18 has been precoated onto 96-well plates. Standards(NSO, S22-H153) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for TNFRSF18 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 TNFRSF18 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 4000pg/mL, 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL mouse TNFRSF18 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 TNFRSF18 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(pg/ml): 228, Standard deviation: 10.5, CV(%): 4.6• Sample 2: n=16, Mean(pg/ml): 1805, Standard deviation: 97.47, CV(%): 5.4• Sample 3: n=16, Mean(pg/ml): 3208, Standard deviation: 96.24, CV(%): 3,• Sample 1: n=24, Mean(pg/ml): 324, Standard deviation: 17.82, CV(%): 5.5• Sample 2: n=24, Mean(pg/ml): 2125, Standard deviation: 144.5, CV(%): 6.8• Sample 3: n=24, Mean(pg/ml): 3154, Standard deviation: 220.8, CV(%): 7
Restrictions:	For Research Use only

Handling

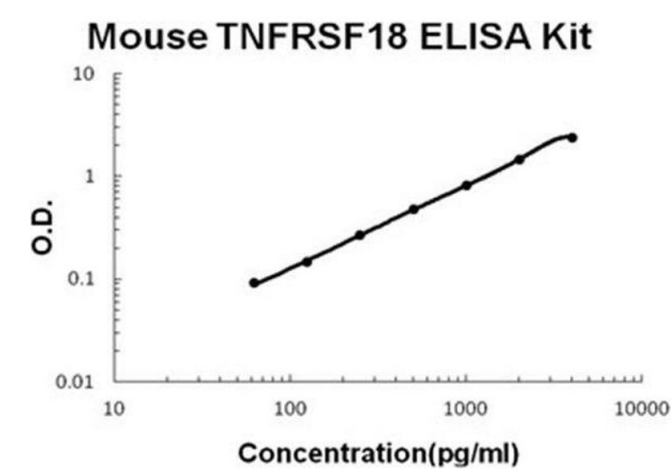
Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

Publications

Product cited in:	Liu, Zhu, Zhou, Wei, Long, Chen, Ling, Ge, Zhuo: "Endoplasmic reticulum stress promotes
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amyloid-beta peptides production in RGC-5 cells." in: **Cell stress & chaperones**, Vol. 19, Issue 6, pp. 827-35, (2014) ([PubMed](#)).

Peng, Dai, Ji, Dai: "The separate roles of endothelin receptors participate in remodeling of matrix metalloproteinase and connexin 43 of cardiac fibroblasts in maladaptive response to isoproterenol." in: **European journal of pharmacology**, Vol. 634, Issue 1-3, pp. 101-6, (2010) ([PubMed](#)).



ELISA

Image 1. Mouse TNFRSF18/GITR PicoKine ELISA Kit standard curve