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Datasheet for ABIN1889449

CD70 ELISA Kit

1 Image

Overview

Quantity:	96 tests
Target:	CD70
Binding Specificity:	AA 45-195
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 CD70/TNFSF7/cd27L
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: S45-P195
Specificity:	Expression system for standard: NSO Immunogen sequence: S45-P195
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

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: CD70

Alternative Name: CD70 ([CD70 Products](#))

Background: Protein Function: Cytokine that binds to CD27. Plays a role in T-cell activation. Induces the proliferation of costimulated T-cells and enhances the generation of cytolytic T-cells. .
Background: CD70(Cluster of Differentiation 70), also known as TNFSF7 or CD27L, is a ligand for CD27. This gene is mapped to 19p13.3. CD70 is a surface antigen found on activated, but not resting, T and B lymphocytes. It has been found that CD70 induced proliferation of costimulated T cells and enhanced generation of cytolytic T cells. CD70 is homologous to the ligands of the TNF receptor family, including TNF-alpha, TNF-beta, and the CD40 ligand, showing 19 to 24 % amino acid sequence identity in the extracellular region.
Synonyms: CD70 antigen,CD27 ligand,CD27-L,Tumor necrosis factor ligand superfamily member 7,CD70,Cd70,Cd27l, Cd27lg, Tnfsf7,
Full Gene Name: CD70 antigen
Cellular Localisation: Membrane, Single-pass type II membrane protein.

Gene ID: 21948

UniProt: [O55237](#)

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.

Comment: Tissue Specificity: Very low level of expression. Detected in splenocytes and thymocytes.

Plate: Pre-coated

Protocol: mouse CD70 ELISA Kit is based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for CD70 has been precoated onto 96-well

Application Details

plates. Standards(NSO, S45-P195) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CD70 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. HRP substrate TMB are used to visualize HRP enzymatic reaction. TMB is 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 CD70 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 CD70 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 CD70 standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 94, Standard deviation: 3.57, CV(%): 3.8
- Sample 2: n=16, Mean(pg/ml): 511, Standard deviation: 26.06, CV(%): 5.1
- Sample 3: n=16, Mean(pg/ml): 1032, Standard deviation: 44.38, CV(%): 4.3,
- Sample 1: n=24, Mean(pg/ml): 148, Standard deviation: 6.66, CV(%): 4.5
- Sample 2: n=24, Mean(pg/ml): 525, Standard deviation: 32.55, CV(%): 6.2
- Sample 3: n=24, Mean(pg/ml): 1385, Standard deviation: 77.56, CV(%): 5.6

Restrictions: For Research Use only

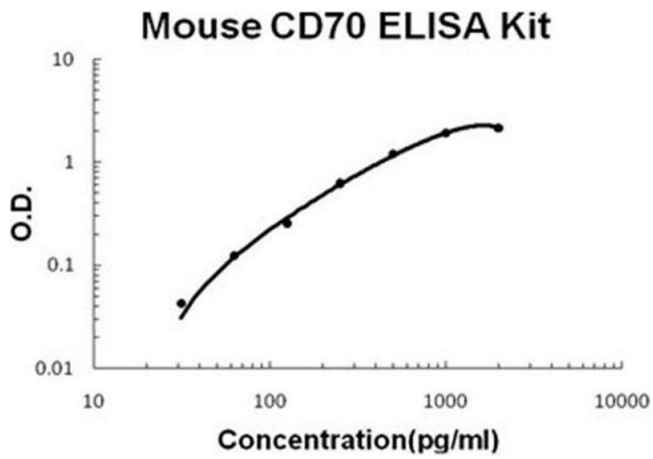
Handling

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 CD70/TNFSF7/cd27L PicoKine ELISA Kit standard curve