

Datasheet for ABIN1672841
2B4 ELISA Kit[Go to Product page](#)

1 Image

Overview

Quantity:	96 tests
Target:	2B4 (CD244)
Binding Specificity:	AA 22-221
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	62.5-4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human CD244/2B4
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: C22-R221
Specificity:	Expression system for standard: NSO Immunogen sequence: C22-R221
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:	2B4 (CD244)
Alternative Name:	CD244 (CD244 Products)
Background:	<p>Protein Function: Modulate other receptor-ligand interactions to enhance leukocyte activation. CD244/2B4 is the only heterophilic receptor of SLAM family. .</p> <p>Background: CD244(Cluster of Differentiation 244) is a human protein encoded by the CD244 gene. It is also known as Natural Killer Cell Receptor 2B4. Members of the CD2 family adhere to each other instead,the cell surface glycoprotein 2B4 is related to CD2 and is implicated in the regulation of NK- and T-cell function. The 2B4 gene was mapped to 1q22 on gene map, where SLAM, CD48, CD84 and LY9 are also located. Using recombinant human NK cell-activating ligand 2B4 fused to domains 3 and 4 of rodent Cd4 and flow cytometric analysis, It was found that CD48 binds to 2B4. BIAcore surface plasmon resonance analysis showed that the affinity of CD48 for 2B4 is approximately 10-fold higher than that shown for CD48 and CD2.</p> <p>Synonyms: Natural killer cell receptor 2B4,NK cell activation-inducing ligand,NAIL,NK cell type I receptor protein 2B4,NKR2B4,h2B4,SLAM family member 4,SLAMF4,Signaling lymphocytic activation molecule 4,CD244,CD244,2B4,</p> <p>Full Gene Name: Natural killer cell receptor 2B4</p> <p>Cellular Localisation: Membrane, Single-pass type I membrane protein.</p>
Gene ID:	51744
UniProt:	Q9BZW8

Application Details

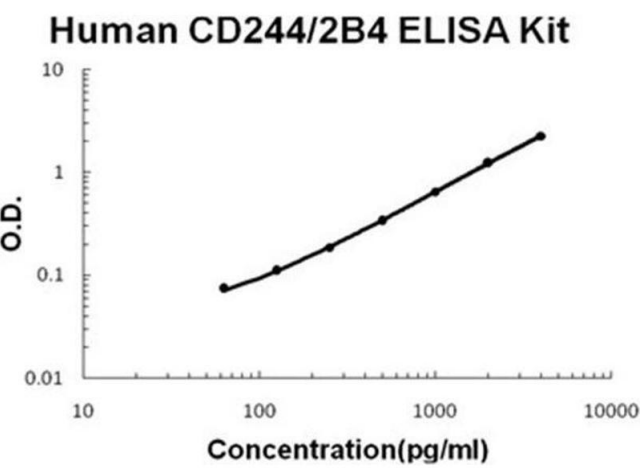
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: Expressed in spleen, PBL, followed by lung, liver, testis and small intestine. Expressed not only in NK cells, but also on monocytes and basophils. .

Application Details

Plate:	Pre-coated
Protocol:	human CD244 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CD244 has been precoated onto 96-well plates. Standards(NSO, C22-R221) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CD244 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 human CD244 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 human CD244 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 human cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human CD244 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(ng/ml): 0.45, Standard deviation: 0.022, CV(%): 4.9• Sample 2: n=16, Mean(ng/ml): 1.2, Standard deviation: 0.076, CV(%): 6.3• Sample 3: n=16, Mean(ng/ml): 3.2, Standard deviation: 0.186, CV(%): 5.8,• Sample 1: n=24, Mean(ng/ml): 0.43, Standard deviation: 0.027, CV(%): 6.2• Sample 2: n=24, Mean(ng/ml): 1.3, Standard deviation: 0.098, CV(%): 7.5• Sample 3: n=24, Mean(ng/ml): 2.9, Standard deviation: 0.194, CV(%): 6.7
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



ELISA

Image 1. Human CD244/2B4 PicoKine ELISA Kit standard curve