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Datasheet for ABIN1889411
IL18R1 ELISA Kit

1 Image

Overview

Quantity:	96 tests
Target:	IL18R1
Binding Specificity:	AA 22-329
Reactivity:	Human
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 Human IL-18R1
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-R329
Specificity:	Expression system for standard: NSO Immunogen sequence: C22-R329
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: IL18R1

Alternative Name: IL18R1 ([IL18R1 Products](#))

Background: Protein Function: Receptor for interleukin 18 (IL-18). Binding to the agonist leads to the activation of NF-kappa-B.

Background: The interleukin-18 receptor 1(IL-18R1), also known as CDw218a(cluster of differentiation w218a) or IL18RA, is an interleukin receptor of the immunoglobulin superfamily. The protein encoded by this gene is a cytokine receptor that belongs to the interleukin 1 receptor family. This gene along with four other members of the interleukin 1 receptor family, including IL1R2, IL1R1, ILRL2(IL-1Rrp2), and IL1RL1(T1/ST2), form a gene cluster on chromosome 2q. This receptor specifically binds interleukin 18(IL18), and is essential for IL18 mediated signal transduction. IFN-alpha and IL12 are reported to induce the expression of this receptor in NK and T cells.

Synonyms: Interleukin-18 receptor 1,IL-18R-1,IL-18R1,CD218 antigen-like family member A,CDw218a,IL1 receptor-related protein,IL-1Rrp,IL1R-rp,CD218a,IL18R1,IL1RRP,

Full Gene Name: Interleukin-18 receptor 1

Cellular Localisation: Membrane, Single-pass type I membrane protein.

Gene ID: 8809

UniProt: [Q13478](#)

Application Details

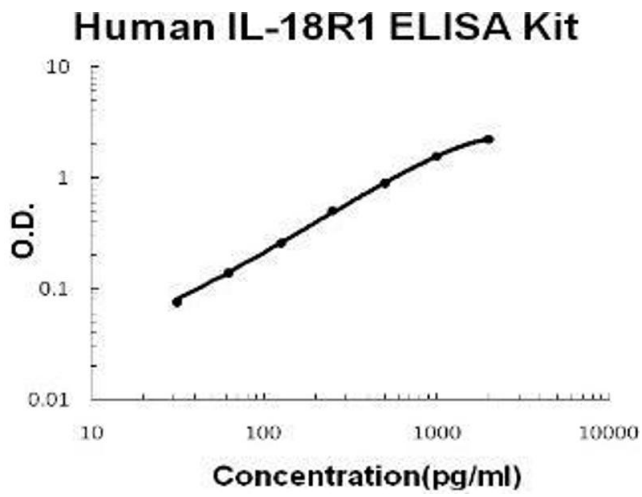
Application Notes: Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.

Comment: Sequence similarities: Belongs to the interleukin-1 receptor family.

Tissue Specificity: Expressed in lung, leukocytes, spleen, liver, thymus, prostate, small intestine, colon, placenta, and heart, and is absent from brain, skeletal muscle, pancreas, and kidney. High level of expression in Hodgkin disease cell lines.

Application Details

Plate:	Pre-coated
Protocol:	human IL-18R1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for IL-18R1 has been precoated onto 96-well plates. Standards(NSO, C22-R329) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for IL-18R1 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 IL-18R1 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 human IL-18R1 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 IL-18R1 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(pg/ml): 250, Standard deviation: 13.2, CV(%): 5.3• Sample 2: n=16, Mean(pg/ml): 625, Standard deviation: 38.7, CV(%): 6.2• Sample 3: n=16, Mean(pg/ml): 1255, Standard deviation: 70.2, CV(%): 5.6,• Sample 1: n=24, Mean(pg/ml): 253, Standard deviation: 20.7, CV(%): 8.2• Sample 2: n=24, Mean(pg/ml): 612, Standard deviation: 45.9, CV(%): 7.5• Sample 3: n=24, Mean(pg/ml): 1078, Standard deviation: 76.5, CV(%): 7.1
Restrictions:	For Research Use only
<h3>Handling</h3> <hr/>	
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 IL-18R1 PicoKine ELISA Kit standard curve