Datasheet for ABIN1672902

IL1RL1 ELISA Kit

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Overview

Quantity:	96 tests
Target:	IL1RL1
Binding Specificity:	AA 19-328
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	156-10.000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human IL1RL1/ST2
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: K19-S328
Specificity:	Expression system for standard: NSO Immunogen sequence: K19-S328
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:	IL1RL1
Alternative Name:	IL1RL1 (IL1RL1 Products)
Background:	Protein Function: Receptor for interleukin-33 (IL-33), its stimulation recruits MYD88, IRAK1, IRAK4, and TRAF6, followed by phosphorylation of MAPK3/ERK1 and/or MAPK1/ERK2, MAPK14, and MAPK8. Possibly involved in helper T-cell function. . Background: Interleukin 1 receptor-like 1, also known as IL1RL1 or ST2, is a protein that in humans is encoded by the IL1RL1 gene. The protein encoded by this gene is a member of the interleukin 1 receptor family. Studies of the similar gene in mouse suggested that this receptor can be induced by proinflammatory stimuli, and may be involved in the function of helper T cells. TL1RL1 is necessary for endotoxin tolerance and, by inhibiting TLR responses, enhances Th2 responses. This gene, interleukin 1 receptor, type I(IL1R1), interleukin 1 receptor, type II(IL1R2) and interleukin 1 receptor-like 2(IL1RL2) form a cytokine receptor gene cluster in a region mapped to chromosome 2q12. Synonyms: Interleukin-1 receptor-like 1,Protein ST2,IL1RL1,DER4, ST2, T1, Full Gene Name: Interleukin-1 receptor-like 1 Cellular Localisation: Isoform C: Cell membrane.
Gene ID:	9173
UniProt:	Q01638

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: Highly expressed in kidney, lung, placenta, stomach, skeletal muscle, colon and small intestine. Isoform A is prevalently expressed in the lung, testis, placenta, stomach and colon. Isoform B is more abundant in the brain, kidney and the liver. Isoform C is not

Application Details

	detected in brain, heart, liver, kidney and skeletal muscle. .
Plate:	Pre-coated
Protocol:	human IL1RL1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for IL1RL1 has been precoated onto 96-well plates. Standards(NSO, K19-S328) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for IL1RL1 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 IL1RL1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 10,000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL human IL1RL1 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 IL1RL1 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(ng/ml): 0.53, Standard deviation: 0.028, CV(%): 5.2 • Sample 2: n=16, Mean(ng/ml): 2.05, Standard deviation: 0.094, CV(%): 4.6 • Sample 3: n=16, Mean(ng/ml): 4.31, Standard deviation: 0.142, CV(%): 3.3, • Sample 1: n=24, Mean(ng/ml): 0.69, Standard deviation: 0.06, CV(%): 8.7 • Sample 2: n=24, Mean(ng/ml): 2.54, Standard deviation: 0.157, CV(%): 6.2 • Sample 3: n=24, Mean(ng/ml): 4.68, Standard deviation: 0.229, CV(%): 4.9
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

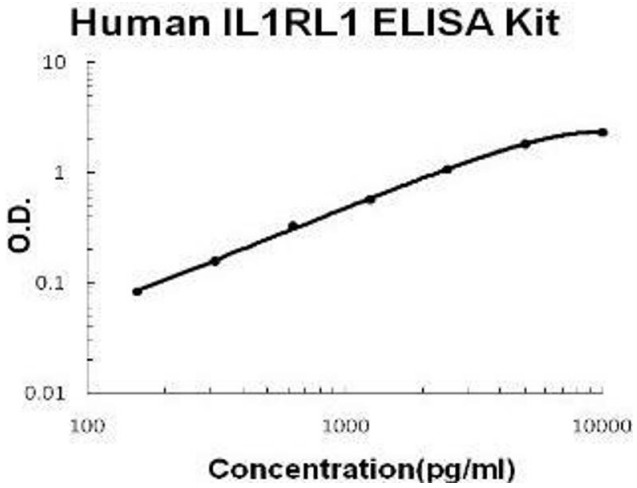
Publications

Product cited in:	Gungor, Unal, Guclu, Gezer, Eyileten, Guzel, Altunoren, Erken, Oguz, Kocyigit, Yilmaz: "IL-33 and

Publications

ST2 levels in chronic kidney disease: Associations with inflammation, vascular abnormalities, cardiovascular events, and survival." in: **PLoS ONE**, Vol. 12, Issue 6, pp. e0178939, (2017) (PubMed).

Images



ELISA

Image 1. Human IL1RL1/ST2 PicoKine ELISA Kit standard curve