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Datasheet for ABIN1672880

IL-31 ELISA Kit





Overview

Quantity:	96 tests
Target:	IL-31 (IL31)
Binding Specificity:	AA 24-164
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 IL-31
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: S24-T164
Specificity:	Expression system for standard: E.coli Immunogen sequence: S24-T164
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:	IL-31 (IL31)
Alternative Name:	IL31 (IL31 Products)
Background:	Protein Function: Activates STAT3 and possibly STAT1 and STAT5 through the IL31 heterodimeric receptor composed of IL31RA and OSMR. IL31 may function in skin immunity. Background: Interleukin-31, also known as IL-31 is a protein that in humans is encoded by the IL31 gene. This gene is mapped to 12q24.31. IL31, which is made principally by activated Th2-type T cells, interacts with a heterodimeric receptor consisting of IL31RA and OSMR that is constitutively expressed on epithelial cells and keratinocytes. IL31 may be involved in the promotion of allergic skin disorders and in regulating other allergic diseases, such as asthma. IL31 may function in skin immunity. Synonyms: Interleukin-31,IL-31,IL31, Full Gene Name: Interleukin-31 Cellular Localisation: Secreted.
Gene ID:	386653
UniProt:	Q6EBC2
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: Detected at low levels in testis, bone marrow, skeletal muscle, kidney, colon, thymus, small intestine and trachea.
Plate:	Pre-coated
Protocol:	human IL-31 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for IL-31 has been precoated onto 96-well plates. Standards(E.coli, S24-T164) and test samples are added to the wells, a biotinylated

detection polyclonal antibody from goat specific for IL-31 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-31 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 IL-31 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-31 standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 496, Standard deviation: 17.36, CV(%): 3.5
- Sample 2: n=16, Mean(pg/ml): 1361, Standard deviation: 64, CV(%): 4.7
- Sample 3: n=16, Mean(pg/ml): 2665, Standard deviation: 154.6, CV(%): 5.8,
- Sample 1: n=24, Mean(pg/ml): 582, Standard deviation: 30.85, CV(%): 5.3
- Sample 2: n=24, Mean(pg/ml): 1532, Standard deviation: 85.8, CV(%): 5.6
- Sample 3: n=24, Mean(pg/ml): 3031, Standard deviation: 203.1, CV(%): 6.7

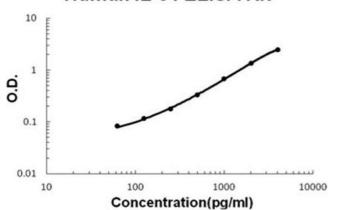
Restrictions:

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

Human IL-31 ELISA Kit



ELISA

Image 1. Human IL-31 PicoKine ELISA Kit standard curve