Datasheet for ABIN1672846

IL-22 ELISA Kit

1 Image | 2 Publications

Go to Product page

Overview

Quantity:	96 tests
Target:	IL-22 (IL22)
Binding Specificity:	AA 34-179
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	15.6-1000 pg/mL
Minimum Detection Limit:	15.6 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human IL-22
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: A34-I179
Specificity:	Expression system for standard: E.coli Immunogen sequence: A34-I179
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-22 (IL22)
Alternative Name:	IL22 (IL22 Products)
Background:	Protein Function: Cytokine that contributes to the inflammatory response in vivo. Background: Interleukin-22(IL-22), also known as ILTIF, is protein that in humans is encoded by the IL22 gene. IL-22 a member of a group of cytokines called the IL-10 family or IL-10 superfamily a class of potent mediators of cellular inflammatory responses. Using FISH, the IL22 gene is mapped to chromosome 12q15, close to the IFNG and the herpesvirus saimiri-induced AK155 genes. IL-22 can contribute to immune disease through the stimulation of inflammatory responses, S100s and defensins. IL-22 also promotes hepatocyte survival in the liver and epithelial cells in the lung and gut similar to IL-10. In some contexts, the pro-inflammatory versus tissue-protective functions of IL-22 are regulated by the often co-expressed cytokine IL-17A. Synonyms: Interleukin-22,IL-22,Cytokine Zcyto18,IL-10-related T-cell-derived-inducible factor,IL-TIF,IL22,ILTIF, ZCYTO18,UNQ3099/PRO10096, Full Gene Name: Interleukin-22 Cellular Localisation: Secreted.
Gene ID:	50616
UniProt:	Q9GZX6

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 IL-10 family.
Plate:	Pre-coated
Protocol:	human IL-22 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay

Application Details

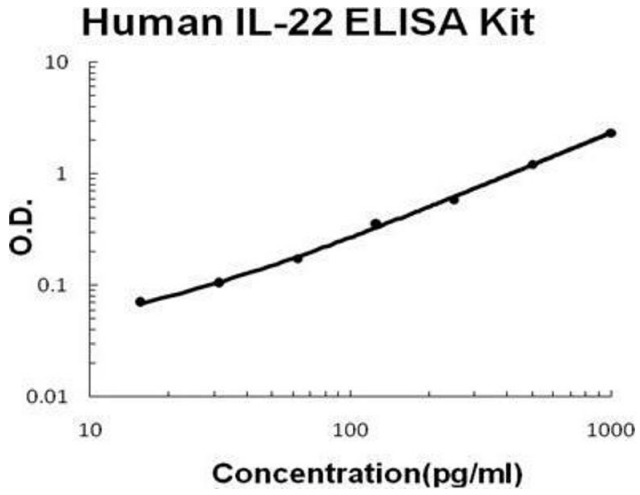
	technology. A monoclonal antibody from mouse specific for IL-22 has been precoated onto 96-well plates. Standards(E.coli, A34-I179) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for IL-22 is added subsequently and then followed by washing with 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-22 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL, 15.6pg/mL human IL-22 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-22 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 74, Standard deviation: 3.63, CV(%): 4.9 • Sample 2: n=16, Mean(pg/ml): 312, Standard deviation: 18.1, CV(%): 5.8 • Sample 3: n=16, Mean(pg/ml): 611, Standard deviation: 37.3, CV(%): 6.1, • Sample 1: n=24, Mean(pg/ml): 87, Standard deviation: 4.7, CV(%): 5.4 • Sample 2: n=24, Mean(pg/ml): 386, Standard deviation: 25.5, CV(%): 6.6 • Sample 3: n=24, Mean(pg/ml): 695, Standard deviation: 48, CV(%): 6.9
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:	Sancakdar, Guven, Uysal, Deveci, Gültürk: "Important of Angiopoietic System in Evaluation of Endothelial Damage in Children with Crimean-Congo Hemorrhagic Fever." in: **The Pediatric infectious disease journal**, Vol. 34, Issue 8, pp. e200-5, (2015) (PubMed).



ELISA

Image 1. Human IL-22 PicoKine ELISA Kit standard curve