Datasheet for ABIN4986947

IL-22 ELISA Kit

1 Image

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Overview

Quantity:	96 tests
Target:	IL-22 (IL22)
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	31.25-2000 pg/mL
Minimum Detection Limit:	31.25 pg/mL
Application:	ELISA

Product Details

Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (citrate), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	Natural and recombinant Human IL-22 Ligand
Sensitivity:	15 pg/mL
Material not included:	• Microplate reader. • Pipettes and pipette tips. • EP tube Deionized or distilled water.

Target Details

Target:	IL-22 (IL22)

Target Details

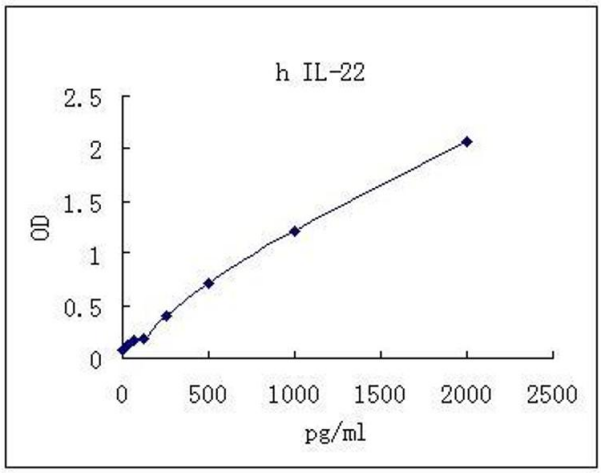
Alternative Name:	IL-22 (IL22 Products)
Background:	Interleukin 22 (IL-22), also known as IL-10-related T cell-derived inducible factor (IL-TIF), is a member of the IL-10 cytokine family. Other members of this family include IL-10, IL-19, IL-20, IL-24, and IL-26 (1). IL-22 was initially identified as a gene induced by IL-9 in mouse T cells and mast cells (2). Human IL-22 cDNA encodes a 179 amino acid (aa) protein with a putative 33 aa signal peptide, sharing approximately 79 % and 22 % aa sequence identity with mouse IL-22 and human IL-10, respectively (3, 4). Although the related IL-10 is thought to act as a dimer, the crystal structure of IL-22 suggests it may interact with its receptor as a monomer (5). The functional IL-22 receptor is of the class 2 subtype and consists of two receptor subunits,IL-22 R (previously an orphan receptor named CRF2-9) and IL-10 R (previously known as CRF2-4) (6). The IL-10 R chain is shared by IL-10, IL-26, IL-28A, IL-28B, and IL-29 (7, 8).IL-22 R is expressed primarily in the pancreas, and to a lesser extent, tissues of the gastrointestinal tract, kidney, and skin (7, 9 - 12). A soluble receptor, IL-22 binding protein (IL-22BP), has also been described and may act as an endogenous inhibitor of IL-22 activity (13 - 15). IL-22 has been shown to activate Jak/STAT and MAPK signaling pathways and upregulate the production of acute phase proteins (3, 4, 6, 16 - 18).IL-22 is produced primarily by activated Th1-type T cells and NK cells (19). Mouse IL-22 expression is induced in various organs upon lipopolysaccharide injection, suggesting that it may be involved in inflammatory responses (3). In humans, this is supported by the observation that IL-22 is produced by synovial fibroblasts and macrophages of rheumatoid arthritis (RA) patients and is capable of inducing pro-inflammatory responses in RA synovial tissues (20). In addition, it stimulates the production of pro-inflammatory cytokines and anti-microbial defensins in human keratinocytes (9, 10). These activities result in epidermal hyperplasia in models of human skin (9).

Application Details

Application Notes:	Detection Wavelength: 450 nm
Sample Volume:	20 µL
Assay Time:	3 h
Plate:	Pre-coated
Restrictions:	For Research Use only

Handling

Storage:	4 °C



ELISA

Image 1.

