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Datasheet for ABIN1672800 IL-21 ELISA Kit

1 Image

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Overview

Quantity:	96 tests
Target:	IL-21 (IL21)
Binding Specificity:	AA 25-146
Reactivity:	Mouse
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 Mouse IL-21
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: P25-S146
Specificity:	Expression system for standard: E.coli Immunogen sequence: P25-S146
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

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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-21 (IL21)
Alternative Name:	IL21 (IL21 Products)
Background:	Background: Interleukin-21 is a protein that in humans is encoded by the IL21 gene. Interleukin 21 is a cytokine that has potent regulatory effects on cells of the immune system, including natural killer(NK) cells and cytotoxic T cells that can destroy virally infected or cancerous cells By radiation hybrid analysis, the IL21 gene is mapped to chromosome 4q26-q27, near the IL2 gene. IL21 stimulates B-cell proliferation in an anti-CD40-dependent manner but inhibits proliferation stimulated by IL4 plus anti-IgM. The biologic effects of IL21 on NK cells differ between species, with human IL21 enhancing NK cell proliferation and murine IL21 inhibiting NK cell proliferation. IL21 is a cytokine highly expressed by mouse T(H)17 cells. Synonyms: Interleukin ,II21 ,mCG_12674 ,
	Full Gene Name: Interleukin
Gene ID:	60505
UniProt:	Q5SUE2
Pathways:	JAK-STAT Signaling, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response
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.
Plate:	Pre-coated
Protocol:	mouse IL-21 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay
	technology. A monoclonal antibody from rat specific for IL-21 has been precoated onto 96-well
	plates. Standards(E.coli, P25-S146) and test samples are added to the wells, a biotinylated
	detection polyclonal antibody from goat specific for IL-21 is added subsequently and then

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Application Details

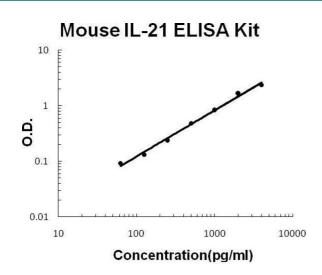
	followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added an
	unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was use
	to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color
	product that changed into yellow after adding acidic stop solution. The density of yellow is
	proportional to the mouse IL-21 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 mouse IL-21 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 mouse cell culture supernates or serum to each empty well. See
	"Sample Dilution Guideline" above for details. It is recommended that each mouse IL-21
	standard solution and each sample be measured in duplicate.
Assay Precision:	 Sample 1: n=16, Mean(pg/ml): 316, Standard deviation: 15.8, CV(%): 5
	 Sample 2: n=16, Mean(pg/ml): 2196, Standard deviation: 80.4, CV(%): 6.2
	• Sample 3: n=16, Mean(pg/ml): 2113, Standard deviation: 99.31, CV(%): 4.7,
	 Sample 1: n=24, Mean(pg/ml): 427, Standard deviation: 25.2, CV(%): 5.9
	• Sample 2: n=24, Mean(pg/ml): 1450, Standard deviation: 97.15, CV(%): 6.7
Restrictions:	• Sample 2: n=24, Mean(pg/ml): 1450, Standard deviation: 97.15, CV(%): 6.7
	 Sample 2: n=24, Mean(pg/ml): 1450, Standard deviation: 97.15, CV(%): 6.7 Sample 3: n=24, Mean(pg/ml): 2485, Standard deviation: 159, CV(%): 6.4
Handling	 Sample 2: n=24, Mean(pg/ml): 1450, Standard deviation: 97.15, CV(%): 6.7 Sample 3: n=24, Mean(pg/ml): 2485, Standard deviation: 159, CV(%): 6.4
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ELISA

Image 1. Mouse IL-21 PicoKine ELISA Kit standard curve