# antibodies -online.com





## Datasheet for ABIN1672895

### **IL-31 ELISA Kit**





#### Overview

Quantity:	96 tests
Target:	IL-31 (IL31)
Binding Specificity:	AA 24-163
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-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: T24-C163
Specificity:	Expression system for standard: E.coli Immunogen sequence: T24-C163
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

#### **Product Details**

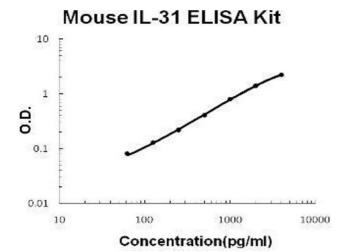
Product Details	
Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing 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. The IL31 gene is mapped to chromosome 12q24.31 and the mouse gene maps to a syntenic region on chromosome 5. 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. Synonyms: Interleukin-31,IL-31,II31, Full Gene Name: Interleukin-31  Cellular Localisation: Secreted.
Gene ID:	76399
UniProt:	Q6EAL8
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-31 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for IL-31 has been precoated onto 96-well plates. Standards(E.coli, T24-C163) 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

## **Application Details**

	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 mouse 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 mouse 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 mouse cell culture supernates, serum or plasma(heparin, EDTA) to
	each empty well. See "Sample Dilution Guideline" above for details. It is recommended that
	each mouse IL-31 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 387, Standard deviation: 21.3, CV(%): 5.5
	<ul> <li>Sample 2: n=16, Mean(pg/ml): 1228, Standard deviation: 78.6, CV(%): 6.4</li> </ul>
	<ul> <li>Sample 3: n=16, Mean(pg/ml): 2155, Standard deviation: 99.13, CV(%): 4.6,</li> </ul>
	<ul> <li>Sample 1: n=24, Mean(pg/ml): 453, Standard deviation: 31.26, CV(%): 6.9</li> </ul>
	<ul> <li>Sample 2: n=24, Mean(pg/ml): 1396, Standard deviation: 100.5, CV(%): 7.2</li> </ul>
	<ul> <li>Sample 3: n=24, Mean(pg/ml): 2370, Standard deviation: 128, CV(%): 5.4</li> </ul>
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



#### **ELISA**

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