

Datasheet for ABIN1672780

**CTLA4 ELISA Kit****1** Image[Go to Product page](#)

## Overview

Quantity:	96 tests
Target:	CTLA4
Binding Specificity:	AA 37-162
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	156-10000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

## Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse CTLA4
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: A37-F162
Specificity:	Expression system for standard: NSO Immunogen sequence: A37-F162
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:	CTLA4
Alternative Name:	CTLA4 ( <a href="#">CTLA4 Products</a> )
Background:	<p>Protein Function: Inhibitory receptor acting as a major negative regulator of T-cell responses. The affinity of CTLA4 for its natural B7 family ligands, CD80 and CD86, is considerably stronger than the affinity of their cognate stimulatory coreceptor CD28 (By similarity). .</p> <p>Background: CTLA-4(Cytotoxic T-Lymphocyte Antigen 4), also known as CD152(Cluster of differentiation 152), is a protein receptor that down regulates the immune system. CTLA4 is a member of the immunoglobulin superfamily, which is expressed on the surface of Helper T cells and transmits an inhibitory signal to T cells. CTLA4 is similar to the T-cell co-stimulatory protein, CD28, and both molecules bind to CD80 and CD86, also called B7-1 and B7-2 respectively, on antigen-presenting cells. CTLA4 transmits an inhibitory signal to T cells, whereas CD28 transmits a stimulatory signal. Blockade of CTLA4 expression in vitro augmented HIV-specific CD4-positive T-cell function.</p> <p>Synonyms: Cytotoxic T-lymphocyte protein 4,Cytotoxic T-lymphocyte-associated antigen 4,CTLA-4,CD152,Ctla4,Cd152,</p> <p>Full Gene Name: Cytotoxic T-lymphocyte protein 4</p> <p>Cellular Localisation: Cell membrane, Single-pass type I membrane protein.</p>
Gene ID:	12477
UniProt:	<a href="#">P09793</a>
Pathways:	<a href="#">Cancer Immune Checkpoints</a>

## Application Details

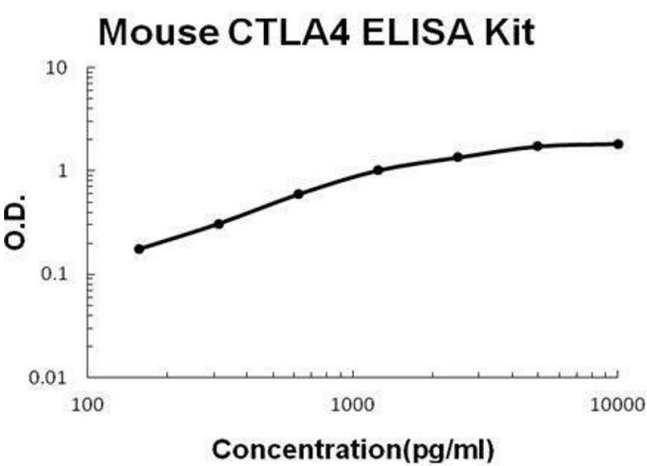
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: Widely expressed with highest levels in lymphoid tissues. .

## Application Details

Plate:	Pre-coated
Protocol:	mouse CTLA4 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for CTLA4 has been precoated onto 96-well plates. Standards(NS0, A37-F162) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CTLA4 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 mouse CTLA4 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL mouse CTLA4 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) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse CTLA4 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none"><li>• Sample 1: n=16, Mean(ng/ml): 1.42, Standard deviation: 0.051, CV(%): 3.6</li><li>• Sample 2: n=16, Mean(ng/ml): 3.53, Standard deviation: 0.138, CV(%): 3.9</li><li>• Sample 3: n=16, Mean(ng/ml): 6.82, Standard deviation: 0.286, CV(%): 4.2,</li><li>• Sample 1: n=24, Mean(ng/ml): 1.47, Standard deviation: 0.063, CV(%): 4.3</li><li>• Sample 2: n=24, Mean(ng/ml): 3.71, Standard deviation: 0.171, CV(%): 4.6</li><li>• Sample 3: n=24, Mean(ng/ml): 6.87, Standard deviation: 0.426, CV(%): 6.2</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 CTLA4 PicoKine ELISA Kit standard curve