



Mouse Programmed Death 1(PD-1)ELISA Kit

Product Code	CSB-E13586m
Abbreviation	PDCD1
Protein Biological Process 1	Apoptosis/Autophagy
Target Name	programmed cell death 1
Uniprot No.	Q02242
Alias	CD279, PD1, SLEB2, hPD-1, hPD-I
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Protein Biological Process 3	Apoptosis
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	0.312 ng/mL-20 ng/mL
Sensitivity	0.078 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Cell Biology
Quality Control	<p>A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm.</p> <p>An incubator can provide stable incubation conditions up to 37°C±5°C.</p> <p>Centrifuge</p> <p>Vortex</p> <p>Squirt bottle, manifold dispenser, or automated microplate washer</p> <p>Absorbent paper for blotting the microtiter plate</p> <p>50-300ul multi-channel micropipette</p> <p>Pipette tips</p> <p>Single-channel micropipette with different ranges</p> <p>100ml and 500ml graduated cylinders</p> <p>Deionized or distilled water</p> <p>Timer</p> <p>Test tubes for dilution</p>
Gene Names	Pdcd1
Tag Info	quantitative



Protein Description	Sandwich			
Component	<p>A micro ELISA plate --- The 96-well plate has been pre-coated with an anti-human PD-1 antibody. This dismountable microplate can be divided into 12 x 8 strip plates.</p> <p>Two vials lyophilized standard ---Dilute a bottle of the standard at dilution series, read the OD values, and then draw a standard curve.</p> <p>One vial Biotin-labeled PD-1 antibody (100 x concentrate) (120 μl/bottle) ---Act as the detection antibody.</p> <p>One vial HRP-avidin (100 x concentrate) (120 μl/bottle) ---Bind to the detection antibody and react with the TMB substrate to make the solution chromogenic.</p> <p>One vial Biotin-antibody Diluent (15 ml/bottle) ---Dilute the Biotin-antibody.</p> <p>One vial HRP-avidin Diluent (15 ml/bottle) ---Dilute the HRP-avidin solution.</p> <p>One vial Sample Diluent (50 ml/bottle)---Dilute the sample to an appropriate concentration.</p> <p>One vial Wash Buffer (25 x concentrate) (20 ml/bottle) ---Wash away unbound or free substances.</p> <p>One vial TMB Substrate (10 ml/bottle) ---Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue.</p> <p>One vial Stop Solution (10 ml/bottle) ---Stop the color reaction. The solution color immediately turns from blue to yellow.</p> <p>Four Adhesive Strips (For 96 wells) --- Cover the microplate when incubation.</p> <p>An instruction manual</p>			
Description	<p>This Mouse PDCD1 ELISA Kit was designed for the quantitative measurement of Mouse PDCD1 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 0.312 ng/mL-20 ng/mL and the sensitivity is 0.078 ng/mL.</p>			
Target Details	<p>This gene encodes a cell surface membrane protein of the immunoglobulin superfamily. This protein is expressed in pro-B-cells and is thought to play a role in their differentiation. In mice, expression of this gene is induced in the thymus when anti-CD3 antibodies are injected and large numbers of thymocytes undergo apoptosis. Mice deficient for this gene bred on a BALB/c background developed dilated cardiomyopathy and died from congestive heart failure. These studies suggest that this gene product may also be important in T cell function and contribute to the prevention of autoimmune diseases.</p>			
Product Precision	<p>Intra-assay Precision (Precision within an assay): CV%<8%</p> <p>Three samples of known concentration were tested twenty times on one plate to assess.</p> <p>Inter-assay Precision (Precision between assays): CV%<10%</p> <p>Three samples of known concentration were tested in twenty assays to assess.</p>			
Linearity	<p>To assess the linearity of the assay, samples were spiked with high concentrations of mouse PD-1 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.</p> <table><tr><td>?</td><td>Sample</td><td>Serum(n=4)</td></tr></table>	?	Sample	Serum(n=4)
?	Sample	Serum(n=4)		



1:1	Average %	97
	Range %	92-101
1:2	Average %	91
	Range %	85-96
1:4	Average %	84
	Range %	80-88
1:8	Average %	95
	Range %	95-99

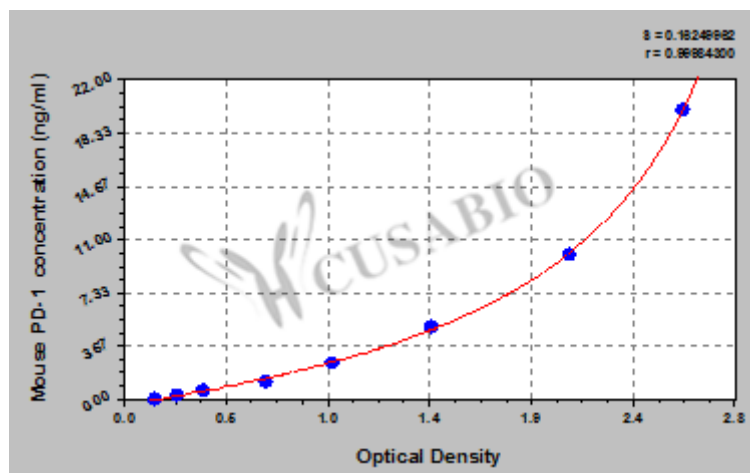
Recovery

The recovery of mouse PD-1 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	101	96-107
EDTA plasma (n=4)	95	90-100

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	Corrected
20	2.652	2.528	2.590	2.430
10	2.121	2.009	2.065	1.905
5	1.439	1.417	1.428	1.268
2.5	0.994	0.952	0.973	0.813
1.25	0.651	0.680	0.666	0.506
0.625	0.384	0.375	0.380	0.220
0.312	0.256	0.261	0.259	0.099
0	0.163	0.156	0.160	?

Msds

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