# .-online.com antibodies

Datasheet for ABIN1672777 CD80 ELISA Kit

Image



### Overview

Quantity:	96 tests
Target:	CD80
Binding Specificity:	AA 35-242
Reactivity:	Human
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 Human B7-1/CD80
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO
	Immunogen sequence: V35-N242
Specificity:	Expression system for standard: NSO
	Immunogen sequence: V35-N242
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 1/4 | Product datasheet for ABIN1672777 | 09/11/2023 | Copyright antibodies-online. All rights reserved.

### 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

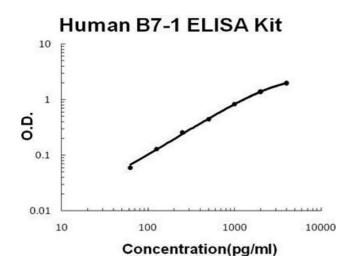
## Target Details

Target:	CD80
Alternative Name:	CD80 (CD80 Products)
Background:	Protein Function: Involved in the costimulatory signal essential for T- lymphocyte activation. T-
	cell proliferation and cytokine production is induced by the binding of CD28, binding to CTLA-4
	has opposite effects and inhibits T-cell activation
	Background: The protein CD80(Cluster of Differentiation 80) is a molecule found on activated B
	cells and monocytes which provides a costimulatory signal necessary for T cell activation and
	survival. It is also known as B7-1. The cDNA for B7-1 predicts a type I membrane protein, i.e.,
	one synthesized with a signal peptide that is cleaved upon translocation across the
	endoplasmic membrane. The protein is predicted to contain 2 extracellular domains structurally
	similar to those of Ig, a hydrophobic transmembrane region, and a short cytoplasmic domain.
	The CD80 and CD86 genes encode B7-1 and B7-2, respectively, which are structurally similar
	members of the immunoglobulin superfamily expressed on a variety of hematopoietic cell
	types. B7-1 and B7-2 provide a costimulatory signal to T cells by interacting with CD28 and
	CTLA4.
	Synonyms: T-lymphocyte activation antigen CD80,Activation B7-1 antigen,BB1,CTLA-4 counter-
	receptor B7.1,B7,CD80,CD80,CD28LG, CD28LG1, LAB7,
	Full Gene Name: T-lymphocyte activation antigen CD80
	Cellular Localisation: Membrane, Single-pass type I membrane protein.
Gene ID:	941
UniProt:	P33681
Pathways:	TCR Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin
	Signaling Pathway, Positive Regulation of Immune Effector Process, Cancer Immune
	Checkpoints

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 2/4 | Product datasheet for ABIN1672777 | 09/11/2023 | Copyright antibodies-online. All rights reserved.

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:	Sequence similarities: Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Tissue Specificity: Expressed on activated B-cells, macrophages and dendritic cells.
Plate:	Pre-coated
Protocol:	human CD80 ELISA Kit is based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for CD80 has been precoated onto 96-well plates. Standards(NSO, V35-N242) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for CD80 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. HRP substrate TMB are used to visualize HRP enzymatic reaction. TMB is 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 human CD80 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 human CD80 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 human cell culture supernates or serum to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human CD80 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul> <li>Sample 1: n=16, Mean(ng/ml): 0.22, Standard deviation: 0.013, CV(%): 5.7</li> <li>Sample 2: n=16, Mean(ng/ml): 1.47, Standard deviation: 0.090, CV(%): 6.1</li> <li>Sample 3: n=16, Mean(ng/ml): 2.34, Standard deviation: 0.185, CV(%): 7.9,</li> <li>Sample 1: n=24, Mean(ng/ml): 0.27, Standard deviation: 0.018, CV(%): 6.8</li> <li>Sample 2: n=24, Mean(ng/ml): 1.56, Standard deviation: 0.115, CV(%): 7.4</li> <li>Sample 3: n=24, Mean(ng/ml): 2.58, Standard deviation: 0.214, CV(%): 8.3</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

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 3/4 | Product datasheet for ABIN1672777 | 09/11/2023 | Copyright antibodies-online. All rights reserved.



#### **ELISA**

Image 1. Human B7-1/CD80 PicoKine ELISA Kit standard curve

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 4/4 | Product datasheet for ABIN1672777 | 09/11/2023 | Copyright antibodies-online. All rights reserved.