APA788Hu61 100μg
Active Programmed Cell Death Protein 1 Ligand 1 (PDL1)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Eukaryotic expression.
Host: 293F cell
Residues: Phe19~Arg238
Tags: N-terminal His-tag
Purity: >99%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: 10mM PBS, pH7.6, containing 5% trehalose.
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 6.5
Predicted Molecular Mass: 26.8kDa
Accurate Molecular Mass: 38kDa as determined by SDS-PAGE reducing conditions.
Phenomenon explanation:
The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affects the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.

[USAGE]

Reconstitute in 10mM PBS (pH7.6) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.
Store at 2-8°C for one month.
Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

FT VTVPKDLYVV EYGSNMTIEC KFPVEKQLDL
AALIVYWEME DKNIIQFVHG EEDLKVQHSS YRQRARLLKD QLSLGNAALQ
ITDVKLQDAG VYRCMISYGG ADYKRITVKV NAPYNKINQR ILVVDPVTSE
HELTCQAEGY PKAEVIWTSS DHQVLSGKTT TTNSKREEKL FNVTSTLRIN
TTTNEIFYCT FRRLDPEENH TAELVIPELP LAHPPNER

[ACTIVITY]

Programmed Cell Death Protein 1 Ligand 1 (PDL1) also known as cluster of differentiation 274 (CD274) or B7 homolog 1 (B7-H1) is a 40kDa type 1 transmembrane protein that has been speculated to play a major role in suppressing the immune system during particular events such as pregnancy, tissue allografts, autoimmune disease and other disease states such as hepatitis. Besides, Programmed Cell Death Protein 1 (PDCD1) has been identified as an interactor of PDL1, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PDL1 and recombinant human PDCD1. Briefly, PDL1 were diluted serially in PBS, with 0.01% BSA (pH 7.4).

Duplicate samples of 100uL were then transferred to PDCD1-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti- PDL1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of PDL1 and PDCD1 was shown in Figure 1, and this effect was in a dose dependent manner.

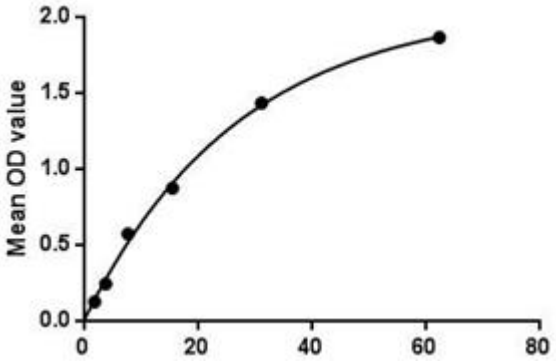

Figure 1. The binding activity of PDL1 with PDCD1(ng/ml).

[IDENTIFICATION]

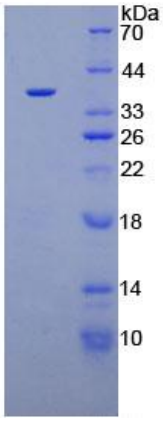

Figure 2. SDS-PAGE

Sample: Active recombinant PDL1, Human

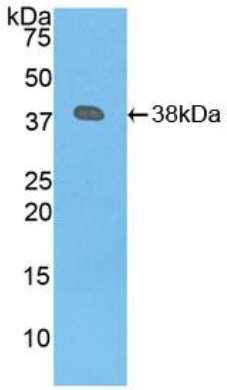

Figure 3. Western Blot

Sample: Recombinant PDL1, Human;

Antibody: Rabbit Anti-Human PDL1 Ab (PAA788Hu06)

[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.