

# Anti-PD-L1 (CD274) Rabbit Monoclonal Antibody

**Catalog # ABO14165** 

## **Specification**

# Anti-PD-L1 (CD274) Rabbit Monoclonal Antibody - Product Information

Application WB, IHC
Primary Accession O9NZO7
Host Rabbit
Isotype Rabbit IgG

Reactivity Rat, Human, Mouse

Clonality Monoclonal Format Liquid

**Description** 

Anti-PD-L1 (CD274) Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat.

### Anti-PD-L1 (CD274) Rabbit Monoclonal Antibody - Additional Information

#### **Gene ID 29126**

#### **Other Names**

Programmed cell death 1 ligand 1, PD-L1, PDCD1 ligand 1, Programmed death ligand 1, hPD-L1, B7 homolog 1, B7-H1, CD274, CD274 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=17635"

target=" blank">HGNC:17635</a>)

## Calculated MW 33275 MW KDa

# **Application Details**

WB 1:100-1:500<br>IHC 1:50-1:100

### **Subcellular Localization**

Isoform 1: Cell membrane; Single-pass type I membrane protein.

# **Tissue Specificity**

Highly expressed in the heart, skeletal muscle, placenta and lung. Weakly expressed in the thymus, spleen, kidney and liver. Expressed on activated T- and B-cells, dendritic cells, keratinocytes and monocytes..

### **Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

## **Immunogen**

A synthesized peptide derived from human PD-L1 (CD274)

#### **Purification**

Affinity-chromatography



Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

# Anti-PD-L1 (CD274) Rabbit Monoclonal Antibody - Protein Information

Name CD274 (<u>HGNC:17635</u>)

#### **Function**

Plays a critical role in induction and maintenance of immune tolerance to self (PubMed: <a href="http://www.uniprot.org/citations/11015443" target=" blank">11015443</a>, PubMed:<a href="http://www.uniprot.org/citations/28813410" target="blank">28813410</a>, PubMed:<a href="http://www.uniprot.org/citations/28813417" target="\_blank">28813417</a>, PubMed:<a href="http://www.uniprot.org/citations/31399419" target="\_blank">31399419</a>). As a ligand for the inhibitory receptor PDCD1/PD-1, modulates the activation threshold of T-cells and limits T-cell effector response (PubMed: <a href="http://www.uniprot.org/citations/11015443" target=" blank">11015443</a>, PubMed:<a href="http://www.uniprot.org/citations/28813410" target="blank">28813410</a>, PubMed:<a href="http://www.uniprot.org/citations/28813417" target="blank">28813417</a>, PubMed:<a href="http://www.uniprot.org/citations/36727298" target="blank">36727298</a>). Through a yet unknown activating receptor, may costimulate T-cell subsets that predominantly produce interleukin-10 (IL10) (PubMed:<a href="http://www.uniprot.org/citations/10581077" target=" blank">10581077</a>). Can also act as a transcription coactivator: in response to hypoxia, translocates into the nucleus via its interaction with phosphorylated STAT3 and promotes transcription of GSDMC, leading to pyroptosis (PubMed:<a href="http://www.uniprot.org/citations/32929201" target=" blank">32929201</a>).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Early endosome membrane; Single-pass type I membrane protein. Recycling endosome membrane; Single-pass type I membrane protein. Nucleus. Note=Associates with CMTM6 at recycling endosomes, where it is protected from being targeted for lysosomal degradation (PubMed:28813417). Translocates to the nucleus in response to hypoxia via its interaction with phosphorylated STAT3 (PubMed:32929201). [Isoform 2]: Endomembrane system; Single-pass type I membrane protein

#### **Tissue Location**

Highly expressed in the heart, skeletal muscle, placenta and lung. Weakly expressed in the thymus, spleen, kidney and liver. Expressed on activated T- and B-cells, dendritic cells, keratinocytes and monocytes.

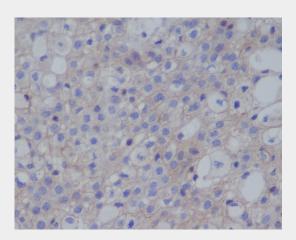
#### Anti-PD-L1 (CD274) Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-PD-L1 (CD274) Rabbit Monoclonal Antibody - Images





Immunohistochemical analysis of paraffin-embedded human thymoma, using PD-L1 (CD274) Antibody.

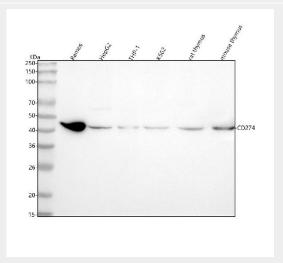


Figure 1. Western blot analysis of PD-L1 using anti-PD-L1 antibody (M00109). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Ramos whole cell lysates,

Lane 2: human HepG2 whole cell lysates,

Lane 3: human THP-1 whole cell lysates,

Lane 4: human K562 whole cell lysates,

Lane 5: rat thymus tissue lysates,

Lane 6: mouse thymus tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PD-L1 antigen affinity purified monoclonal antibody (Catalog # M00109) at 1:100 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PD-L1 at approximately 40 kDa. The expected band size for PD-L1 is at 33 kDa.