

Anti-PD-L1/B7-H1 Antibody
Catalog # ABO11851**Specification**

Anti-PD-L1/B7-H1 Antibody - Product Information

Application	WB
Primary Accession	Q9NZQ7
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Programmed cell death 1 ligand 1(CD274) detection. Tested with WB in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PD-L1/B7-H1 Antibody - Additional Information

Gene ID 29126

Other Names

Programmed cell death 1 ligand 1, PD-L1, PDCD1 ligand 1, Programmed death ligand 1, B7 homolog 1, B7-H1, CD274, CD274, B7H1, PDCD1L1, PDCD1LG1, PDL1

Calculated MW

33275 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

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. .

Protein Name

Programmed cell death 1 ligand 1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

E.coli-derived human PD-L1 recombinant protein (Position: E45-T290). Human PD-L1 shares 69% amino acid (aa) sequence identity with mouse PD-L1.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the immunoglobulin superfamily. BTN/MOG family.

Anti-PD-L1/B7-H1 Antibody - Protein Information

Name CD274 ([HGNC:17635](#))

Function

Plays a critical role in induction and maintenance of immune tolerance to self (PubMed: [11015443](http://www.uniprot.org/citations/11015443), PubMed: [28813410](http://www.uniprot.org/citations/28813410), PubMed: [28813417](http://www.uniprot.org/citations/28813417), PubMed: [31399419](http://www.uniprot.org/citations/31399419)). As a ligand for the inhibitory receptor PDCD1/PD-1, modulates the activation threshold of T-cells and limits T-cell effector response (PubMed: [11015443](http://www.uniprot.org/citations/11015443), PubMed: [28813410](http://www.uniprot.org/citations/28813410), PubMed: [28813417](http://www.uniprot.org/citations/28813417), PubMed: [36727298](http://www.uniprot.org/citations/36727298)). Through a yet unknown activating receptor, may costimulate T-cell subsets that predominantly produce interleukin-10 (IL10) (PubMed: [10581077](http://www.uniprot.org/citations/10581077)). 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: [32929201](http://www.uniprot.org/citations/32929201)).

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

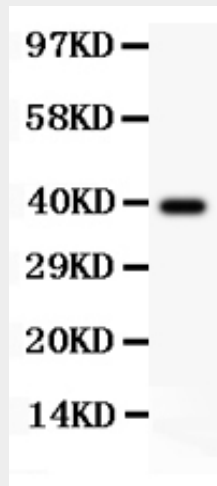
Highly expressed in the heart, skeletal muscle, placenta and lung. Weakly expressed in the thymus, spleen, kidney and liver. Expressed on activated T- and B-cells, dendritic cells, keratinocytes and monocytes.

Anti-PD-L1/B7-H1 Antibody - Protocols

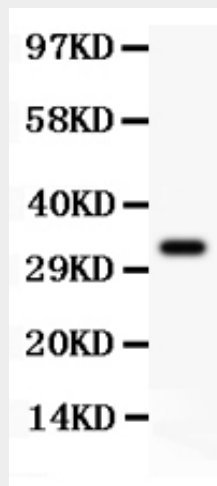
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-PD-L1/B7-H1 Antibody - Images



Anti-PD-L1 Picoband antibody, ABO11851-1.jpg All lanes: Anti PDL1 (ABO11851) at 0.5ug/ml WB: Recombinant Human PDL1 Protein 0.5ng Predicted bind size: 38KD Observed bind size: 38KD



Anti-PD-L1 Picoband antibody, ABO11851-2.jpg All lanes: Anti PDL1 (ABO11851) at 0.5ug/ml WB: HEPG2 Whole Cell Lysate at 40ug Predicted bind size: 33KD Observed bind size: 33KD

Anti-PD-L1/B7-H1 Antibody - Background

Programmed death-ligand 1 (PD-L1) also known as CD274 or B7-H1 is a protein that in humans is encoded by the CD274 gene. It is mapped to 9p24.1. PD-L1 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. It has been concluded that upregulation of PD-L1 on tumor MDCs downregulates T-cell immunity and that PD-L1 blockade may represent an approach for cancer

immunotherapy. PD-L1 can provide positive costimulatory signals for innate and adaptive immunity and for protection against intracellular bacterial infection. What's more, It has been found that PD1/PDL1 pathway may be a good target for restoring antitumor immunity in ovarian cancer.