#### For Research Use Only

# PD-L1/CD274 Monoclonal antibody

Catalog Number: 66248-1-lg Featured Product 384 Publications

BC074984

29126

GeneID (NCBI):

**UNIPROT ID:** 

Q9NZQ7

Full Name:

CD274 molecule Calculated MW:

GenBank Accession Number:



**Basic Information** 

Catalog Number: 66248-1-lg Concentration:

2000 ug/ml Source: Mouse Isotype: lgG1

Immunogen Catalog Number:

AG12443

290 aa, 33 kDa Observed MW:

45-50 kDa, 33 kDa

**Purification Method:** 

Protein G purification

CloneNo.: 2B11D11

Recommended Dilutions:

WB: 1:2000-1:10000 IHC: 1:5000-1:20000 IF/ICC: 1:50-1:500

**Applications** 

**Tested Applications:** WB, IHC, IF/ICC, ELISA

**Cited Applications:** WB, IHC, IF, IP, CoIP, ChIP

Species Specificity: human, mouse, rat, pig

**Cited Species:** 

human, mouse, rat, pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Positive Controls:** 

WB: A375 cells, human placenta tissue, pig lung tissue, human skeletal muscle tissue, HepG2 cells, THP-1 cells, RAW 264.7 cells, A549 cells, K-562 cells, HSC-T6 cells

IHC: human tonsillitis tissue, human heart tissue, human lung cancer tissue, human placenta tissue, mouse heart tissue

IF/ICC: HeLa cells,

## **Background Information**

Programmed cell death ligand 1 (PD-L1, CD274, or B7-H1), is the first member of B7 family to be discovered. B7 family molecules are type I transmembrane proteins belonging to the immunoglobulin superfamily. In concert with their CD28 family receptors, the B7s are key regulators of the adaptive immune response. PD-L1 is suggested as a  $negative\ regulator\ of\ T\ and\ B\ cell,\ and\ plays\ important\ role\ in\ mediating\ tolerance\ of\ lymphocytes\ to\ self-antigens.$ It is also involved in the costimulatory signal, essential for T-cell proliferation and production of IL10 and IFNG, in an IL2-dependent and a PD-1-independent manner. PD-L1 is a 290 aa transmembrane protein with a calculated molecular weight of 33 kDa, it is predicted to be 27-30 kDa after signal peptide cleavage (PMID: 25609200; 17076679). The apparent molecular weight has also been reported as 45-70 kDa, major glycosylated form of 45-50 kDa and multiple post-translational modifications form of 65-70 kDa (PMID: 18760278; 16493058).

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Jiacheng Huang	34650926	Front Oncol	IHC
Youqiong Ye	32988398	Genome Med	WB
Hao Zhang	36136350	Brief Bioinform	IHC

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

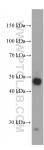
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

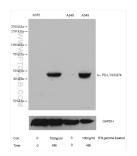
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

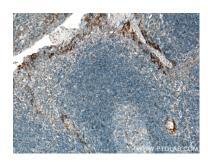
## Selected Validation Data



human placenta tissue were subjected to SDS PAGE followed by western blot with 66248-1-lg (PD-L1/CD274 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



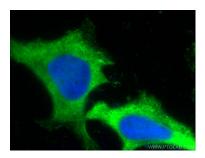
Untreated and IFN gamma treated A375 cells and A549 cells were subjected to SDS PAGE followed by western blot with 66248-1-1g (PD-L1/CD274 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66248-1-1g (PD-L1/CD274 antibody) at dilution of 1:10000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66248-1-Ig (PD-L1/CD274 antibody) at dilution of 1:10000 (under 4x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (10% Formaldehyde ) fixed Hela cells using 66248-1-Ig(PD-L1/CD274 antibody) at dilution of 1:300 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).