

For Research Use Only

# PD-L1/CD274 Monoclonal antibody

Catalog Number: 66248-1-Ig

Featured Product

373 Publications



## Basic Information

<b>Catalog Number:</b> 66248-1-Ig	<b>GenBank Accession Number:</b> BC074984	<b>Purification Method:</b> Protein A purification
<b>Concentration:</b> 2000 ug/ml	<b>GeneID (NCBI):</b> 29126	<b>CloneNo.:</b> 2B11D11
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q9NZQ7	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:5000-1:20000 IF/ICC 1:50-1:500
<b>Isotype:</b> IgG1	<b>Full Name:</b> CD274 molecule	
<b>Immunogen Catalog Number:</b> AG12443	<b>Calculated MW:</b> 290 aa, 33 kDa	
	<b>Observed MW:</b> 45-50 kDa, 33 kDa	

## 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

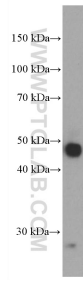
## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

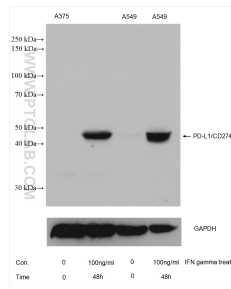
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

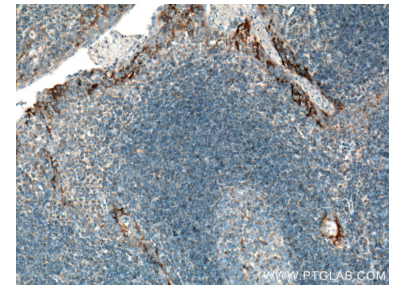
## Selected Validation Data



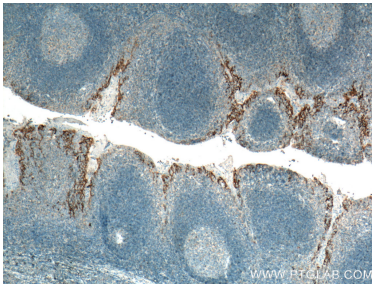
human placenta tissue were subjected to SDS PAGE followed by western blot with 66248-1-Ig (PD-L1/CD274 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



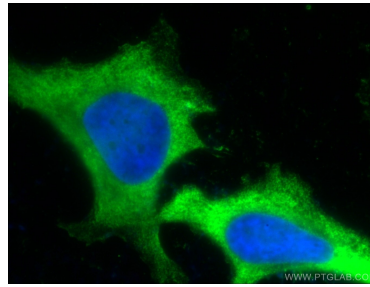
Untreated and IFN gamma treated A375 cells and A549 cells were subjected to SDS PAGE followed by western blot with 66248-1-Ig (PD-L1/CD274 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66248-1-Ig (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 paraffin-embedded 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).