For Research Use Only

PD-L1/CD274 Monoclonal antibody

Catalog Number:66248-1-lg Featured Product 413 Publications



Basic Information

Catalog Number: 66248-1-lg Concentration:

2000 ug/ml Source: Mouse Isotype: lgG1

Immunogen Catalog Number:

AG12443

GenBank Accession Number:

BC074984 GeneID (NCBI): 29126 **UNIPROT ID:** Q9NZQ7

CD274 molecule Calculated MW: 290 aa, 33 kDa

Full Name:

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-P: 1:400-1:1600 IF/ICC: 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, 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-P: human placenta 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

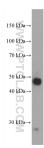
Aliquoting is unnecessary for -20°C storage

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

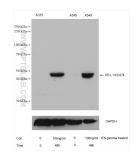
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

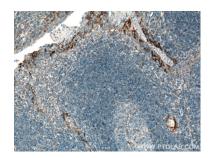
Selected Validation Data



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.



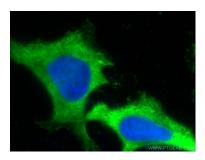
Untreated and IFN gamma treated A375 cells and A549 cells were subjected to SDS PAGE followed by western blot with 66248-1-1g (PD-L1/CD274 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



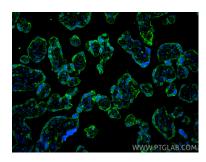
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66248-1-1g (PD-L1/CD274 antibody) at dilution of 1:10000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 66248-1-1g (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).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human placenta tissue using PD-L1/CD274 antibody (66248-1-Ig, Clone: 2B11D11) at dilution of 1:800 and CoraLite® 488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).