For Research Use Only

PD-L1/CD274 Monoclonal antibody

Catalog Number:66248-1-Ig Featured Product 257 Publications

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Basic Information

Catalog Number:
66248-1-Ig

Size:
150ul , Concentration: 2000 μg/ml by Nanodrop;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG12443

GenBank Accession Number:
BC074984

GeneID (NCBI):
29126

UNIPROT ID:
Q9NZQ7

Full Name:
CD274 molecule

Calculated MW:
290 aa, 33 kDa

Observed MW:
45-50 kDa

Purification Method:
Protein A purification

CloneNo.:
2B11D11

Recommended Dilutions:
WB 1:2000-1:10000
IHC 1:5000-1:20000
IF 1:50-1:500

Applications

Tested Applications:
WB, IF, FC, IHC, ELISA

Cited Applications:
WB, IP, IF, FC, IHC, CoIP

Species Specificity:
human, mouse, pig, rat

Cited Species:
human, rat, mouse

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 : 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

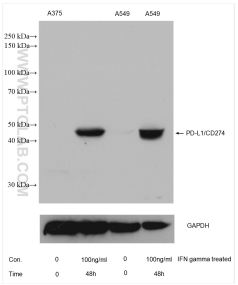
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

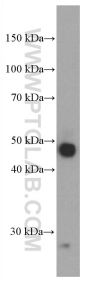
*** 20ul sizes contain 0.1%BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

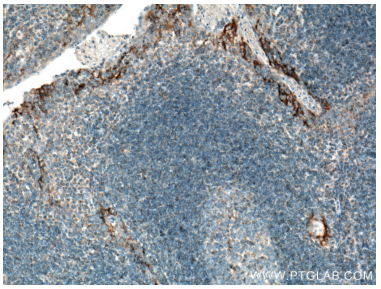
Selected Validation Data



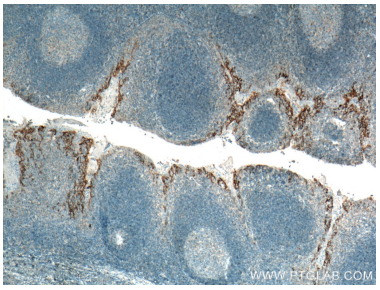
Untreated and IFN gamma treated A375 cells and A549 cells were subjected to SDS PAGE followed by western blot with 66248-1-Ig (PD-L1/CD274 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



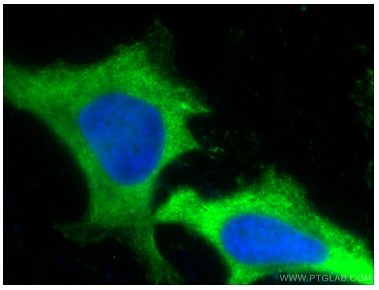
human placenta tissue were subjected to SDS PAGE followed by western blot with 66248-1-Ig (PD-L1/CD274 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



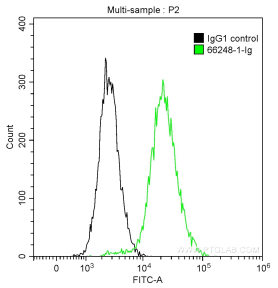
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 66248-1-Ig (PD-L1/CD274 antibody) at dilution of 1:10000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



1X10^6 MDA-MB-231 cells were stained with 0.2 ug Anti-Human PD-L1/CD274 (66248-1-Ig, Clone: 2B11D11) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (green), or stained with 0.2 ug mosue IgG1 isotype control antibody and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (black). Cells were fixed with 90% MeOH.