For Research Use Only

PD-L1/CD274 Polyclonal antibody

Catalog Number:17952-1-AP Featured Product 153 Publications

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Basic Information

Catalog Number:
17952-1-AP

Size:
700 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG12432

GenBank Accession Number:
BC074984

GeneID (NCBI):
29126

UNIPROT ID:
Q9NZQ7

Full Name:
CD274 molecule

Calculated MW:
290 aa, 33 kDa

Observed MW:
45-56 kDa, 65-70 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:300-1:1200
IF 1:10-1:100

Applications

Tested Applications:
FC, IF/ICC, IHC, IP, WB, ELISA

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

Species Specificity:
human, mouse, 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 : human placenta tissue, mouse heart tissue, HepG2 cells, K-562 cells, IFN gamma treated A549 cells, A375 cells, human heart tissue, HeLa cells, mouse skeletal muscle tissue

IP : mouse heart tissue,

IHC : human tonsillitis tissue, mouse heart tissue, human stomach cancer tissue

IF : HEK-293 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
Ching-Yao Yang	29036791	Cancer Biomark	IHC
Gagan Chhabra	34597611	J Invest Dermatol	IHC
Haoyu Guo	36201949	Biomaterials	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

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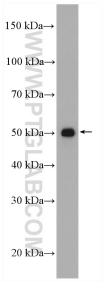
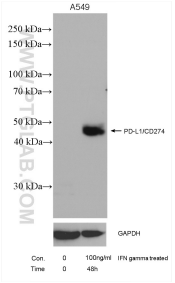
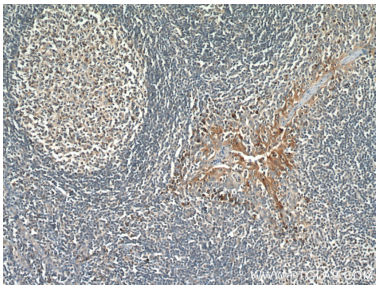
Selected Validation Data



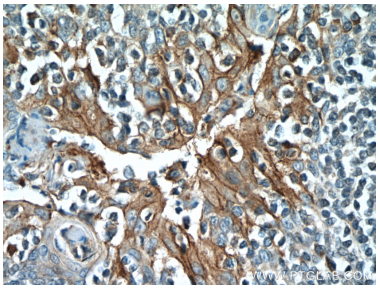
human placenta tissue were subjected to SDS PAGE followed by western blot with 17952-1-AP (PD-L1/CD274 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



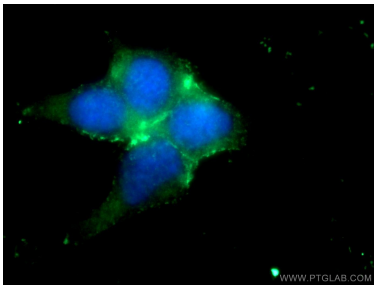
Untreated and IFN gamma treated A549 cells were subjected to SDS PAGE followed by western blot with 17952-1-AP (PD-L1/CD274 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



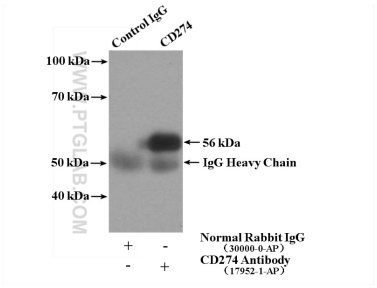
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 17952-1-AP (PD-L1/CD274 antibody) at dilution of 1:600 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



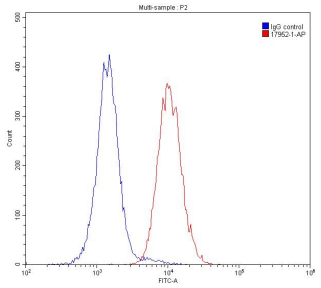
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 17952-1-AP (PD-L1/CD274 antibody) at dilution of 1:600 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of HEK-293 cells using 17952-1-AP (PD-L1/CD274 antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IP result of anti-PD-L1/CD274 (IP:17952-1-AP, 4ug; Detection:66248-1-Ig 1:1000) with mouse heart tissue lysate 4000ug.



1X10^6 Raji cells were stained with 0.20ug PD-L1/CD274 antibody (17952-1-AP, red) and control antibody (blue). Fixed with 90% MeOH.