## For Research Use Only

## PD-L1/CD274 Recombinant antibody

Catalog Number:82719-15-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

82719-15-RR BC074984 Protein A purification GeneID (NCBI): CloneNo.: 100ul, Concentration: 1000 ug/ml by 29126 2H4

Nanodrop: UNIPROT ID: Recommended Dilutions: Q9NZQ7 WB 1:1000-1:4000 Rabbit IHC 1:200-1:800 Full Name: IF-P 1:200-1:800 Isotype: CD274 molecule IgG

Calculated MW:

Immunogen Catalog Number: 290 aa, 33 kDa AG12432 Observed MW: 50 kDa

**Applications** 

**Tested Applications:** WB, IHC, IF-P, ELISA Species Specificity:

human

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: MDA-MB-231 cells, U-87 MG cells, human placenta

IHC: human tonsillitis tissue, human placenta tissue

**Purification Method:** 

IF-P: human tonsillitis tissue,

## **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).

Storage

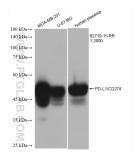
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

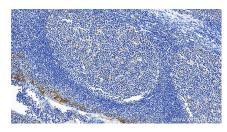
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

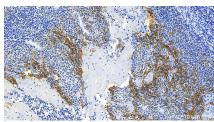
## **Selected Validation Data**



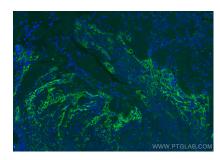
Various lysates were subjected to SDS PAGE followed by western blot with 82719-15-RR (PD-L1/CD274 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



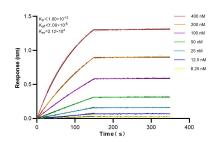
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 82719-15-RR (PD-L1/CD274 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 82719-15-RR (PD-L1/CD274 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human tonsillitis tissue using PD-L1/CD274 antibody (82719-15-RR, Clone: 2H4) at dilution of 1:400 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 82719-15-RR against Human PD-L1/CD274 were performed. The affinity constant is below 1 pM.