## 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 GeneID (NCBI): Size: 1000 ug/ml 29126 UNIPROT ID: Source:

Rabbit Q9NZQ7 Full Name: Isotype: CD274 molecule

Calculated MW: Immunogen Catalog Number: AG12432 290 aa, 33 kDa

> Observed MW: 50 kDa

**Purification Method:** 

Protein A purification

CloneNo.: 2H4

Recommended Dilutions: WB 1:1000-1:4000 IHC 1:200-1:800 IF-P 1:200-1:800

**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

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).

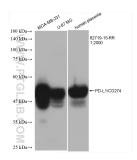
Storage

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

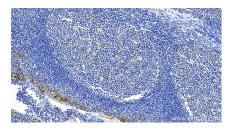
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

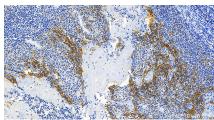
## **Selected Validation Data**



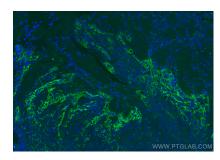
Various lysates were subjected to SDS PAGE followed by western blot with 82719-15-RR (PD-L1/CD274 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



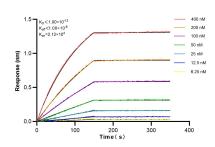
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 82719-15-RR (PD-L1/CD274 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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.