

For Research Use Only

PD-1/CD279 Polyclonal antibody

Catalog Number: 31512-1-AP



Basic Information

Catalog Number: 31512-1-AP	GenBank Accession Number: BC074740	Purification Method: Antigen affinity Purification
Size: 150ul , Concentration: 870 ug/ml by Nanodrop;	GeneID (NCBI): 5133	Recommended Dilutions: IHC: 1:2000-1:8000
Source: Rabbit	UNIPROT ID: Q15116	
Isotype: IgG	Full Name: programmed cell death 1	
Immunogen Catalog Number: EG0974	Calculated MW: 288 aa, 32 kDa	

Applications

Tested Applications: IHC, ELISA	Positive Controls: IHC : human tonsillitis tissue,
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	

Background Information

Programmed cell death 1 (PD-1, also known as CD279) is an immunoinhibitory receptor that belongs to the CD28/CTLA-4 subfamily of the Ig superfamily. It is a 288 amino acid (aa) type I transmembrane protein composed of one Ig superfamily domain, a stalk, a transmembrane domain, and an intracellular domain containing an immunoreceptor tyrosine-based inhibitory motif (ITIM) as well as an immunoreceptor tyrosine-based switch motif (ITSM) (PMID: 18173375). PD-1 is expressed during thymic development and is induced in a variety of hematopoietic cells in the periphery by antigen receptor signaling and cytokines (PMID: 20636820). Engagement of PD-1 by its ligands PD-L1 or PD-L2 transduces a signal that inhibits T-cell proliferation, cytokine production, and cytolytic function (PMID: 19426218). It is critical for the regulation of T cell function during immunity and tolerance. Blockade of PD-1 can overcome immune resistance and also has been shown to have antitumor activity (PMID: 22658127; 23169436). It has been reported that PD-1 is heavily glycosylated and migrates with an apparent molecular mass of 47-55 kDa on SDS-PAGE, which is larger than its predicted mass of 32 kDa (PMID: 8671665; 17640856; 17003438).

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

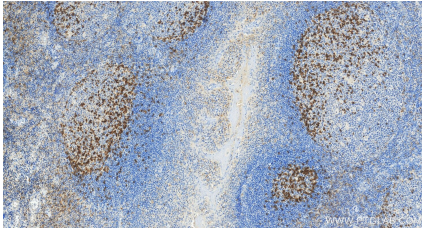
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

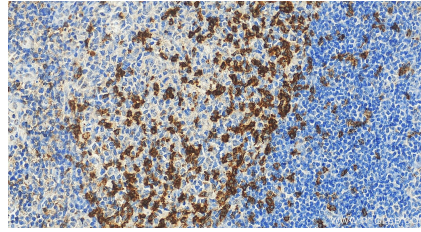
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Selected Validation Data



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 31512-1-AP (PD-1/CD279 antibody) at dilution of 1:4000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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