

For Research Use Only

PD-1/CD279 Polyclonal antibody

Catalog Number: 18106-1-AP

Featured Product

88 Publications



Basic Information

Catalog Number:

18106-1-AP

Concentration:

700 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG12470

GenBank Accession Number:

BC074740

GeneID (NCBI):

5133

UNIPROT ID:

Q15116

Full Name:

programmed cell death 1

Calculated MW:

288 aa, 32 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

IHC: 1:500-1:2000

IF-P: 1:50-1:500

Applications

Tested Applications:

IHC, IF-P, ELISA

Cited Applications:

IHC, IF, IP, CoIP

Species Specificity:

human

Cited Species:

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:

IHC : human tonsillitis tissue, human lymphoma tissue

IF-P : human tonsillitis tissue,

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).

Notable Publications

Author	Pubmed ID	Journal	Application
Xingyu Peng	36248822	Front Immunol	
Damien J Zanker	33005415	Clin Transl Immunology	IHC
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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

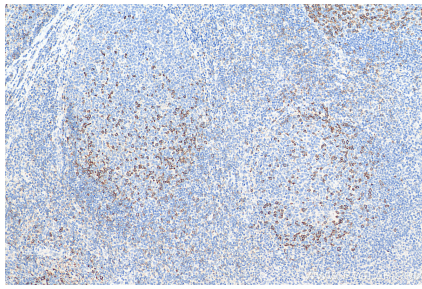
T: 4006900926

E: Proteintech-CN@ptglab.com

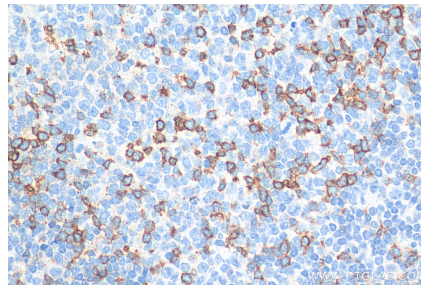
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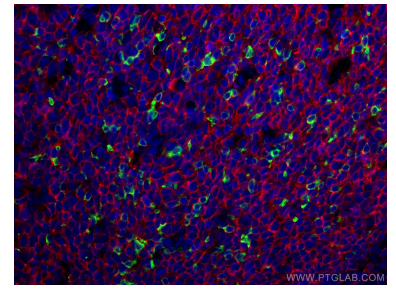
Selected Validation Data



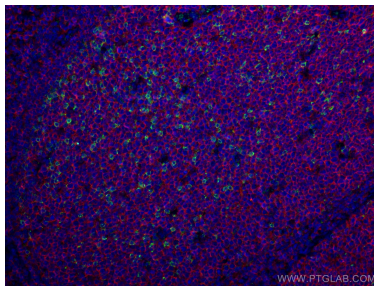
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 18106-1-AP (PD-1/CD279 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



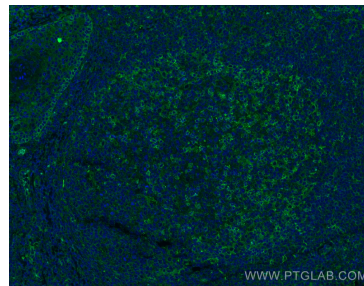
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 18106-1-AP (PD-1/CD279 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using 18106-1-AP (PD-1/CD279 rabbit polyclonal antibody) at dilution of 1:100 and 60271-1-Ig (CD20 mouse monoclonal antibody) at dilution of 1:200, further stained with CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) for 18106-1-AP, and CoraLite594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) for 60271-1-Ig.



Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using 18106-1-AP (PD-1/CD279 rabbit polyclonal antibody) at dilution of 1:100 and 60271-1-Ig (CD20 mouse monoclonal antibody) at dilution of 1:200, further stained with CoraLite488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) for 18106-1-AP, and CoraLite594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) for 60271-1-Ig.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human tonsillitis tissue using PD-1/CD279 antibody (18106-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).