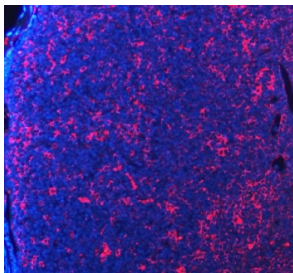


PD-1 Antibody / PDCD1 (R32757)

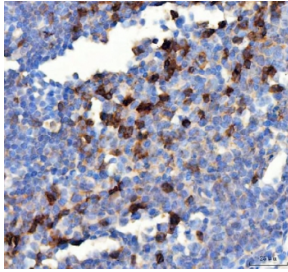
Catalog No.	Formulation	Size
R32757	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

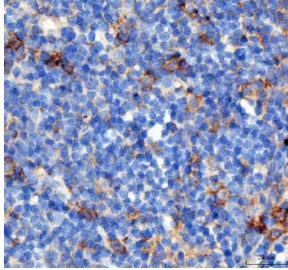
Availability	1-2 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q02242
Localization	Cell surface & cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This PD-1 antibody is available for research use only.



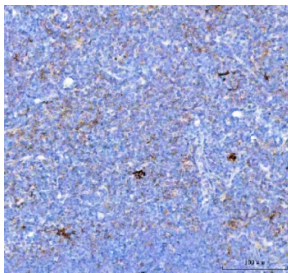
Immunofluorescent staining of FFPE mouse lymph node tissue with PD-1 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



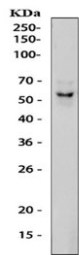
IHC staining of FFPE mouse lymph tissue with PD-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



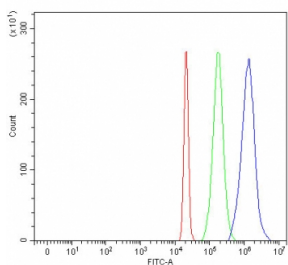
IHC staining of FFPE rat lymph tissue with PD-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat thymus tissue with PD-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of mouse EL-4 cell lysate with PD-1 antibody. Predicted molecular weight ~32 kda (unmodified), 50-55 kDa (glycosylated).



Flow cytometry testing of fixed and permeabilized mouse EL-4 cells with CD59 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= CD59 antibody.

Description

PDCD1 (Programmed cell death 1), also called PD1, encodes a cell surface receptor that is a member of the B7 superfamily involved in immunomodulation. This gene is mapped to 2q37.3. PDCD1 acts as an inhibitory molecule on T cells after interacting with its ligands PDL1 and PDL2. The PDCD1 gene contains 5 exons. This protein is expressed in pro-B-cells and is thought to play a role in their differentiation. Using flow cytometric analysis, it has been found that expression of PDCD1 was upregulated on CD16-positive and CD16-negative monocytes, but not on dendritic cells, in viremic HIV-positive patients, but not in highly active antiretroviral therapy (HAART)-treated HIV-positive patients. PDCD1 upregulation in monocytes was induced by microbial Toll-like receptor ligands and inflammatory cytokines.

Application Notes

Optimal dilution of the PD-1 antibody should be determined by the researcher.

Immunogen

Amino acids 84-117 (NGLSQPVQDARFQIIQLPNRHDFHNMNILDTRRND) from the mouse protein were used as the immunogen for the PD-1 antibody.

Storage

After reconstitution, the PD-1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.