

Anti-PD1 PDCD1 Monoclonal Antibody [4D6]

Catalog Number: M00178-4

About PDCD1

Cell-mediated immune responses are initiated by T lymphocytes that are themselves stimulated by cognate peptides bound to MHC molecules on antigen-presenting cells (APC). T-cell activation is generally self-limited as activated T cells express receptors such as PD-1 (also known as PDCD-1) that mediate inhibitory signals from the APC. PD-1 can bind two different but related ligands, PDL-1 and PDL-2. Upon binding to either of these ligands, signals generated by PD-1 inhibit the activation of the immune response in the absence of "danger signals" such as LPS or other molecules associated with bacteria or other pathogens. Evidence for this is seen in PD-1-null mice who exhibit hyperactivated immune systems and autoimmune diseases. PD-1 is thus one of a growing number of immune checkpoint proteins.

Overview

Product Name	Anti-PD1 PDCD1 Monoclonal Antibody [4D6]
Reactive Species	Human
Description	Boster Bio Anti-PD1 PDCD1 Monoclonal Antibody [4D6] (Catalog # M00178-4). Tested in ELISA, WB, IHC-P, ICC, IF applications. This antibody reacts with Human.
Application	ELISA, IF, IHC-P, ICC, WB
Clonality	Monoclonal Clone: 4D6
Formulation	PD-1 Antibody is supplied in PBS containing 0.02% sodium azide and 50% glycerol.
Storage Instructions	PD-1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. Avoid repeated freeze-thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Host	Mouse
Uniprot ID	Q15116

Technical Details

Immunogen	PD-1 antibody was raised against the extracellular domain of human PD-1.
Predicted Reactive Species	Mouse, Rat
Cross Reactivity	PD-L1 Antibody has no cross-reactivity to PD-L2.
Isotype	IgG1
Form	Liquid
Concentration	1 mg/mL
Purification	PD-1 Antibody is supplied as protein A purified IgG1.

Suggested Dilutions

Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

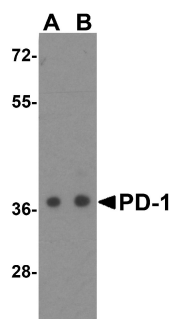
Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

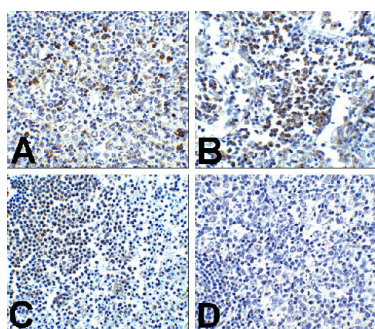
PD-1 antibody can be used for detection of PD-1 by Western blot at 0.25 - 0.5 ug/mL. Antibody can also be used for immunohistochemistry starting at 5 ug/mL. For immunofluorescence start at 20 ug/mL.

Antibody validated: Western Blot in human samples; Immunohistochemistry in human samples; Immunocytochemistry in human samples and Immunofluorescence in human samples. All other applications and species not yet tested. Optimal dilutions for each application should be determined by the researcher.

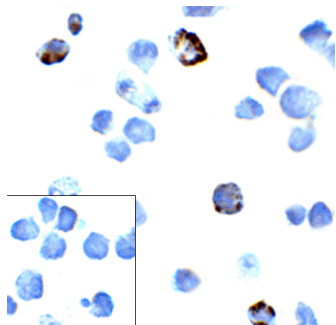
Anti-PD1 PDCD1 Monoclonal Antibody [4D6] (M00178-4) Images



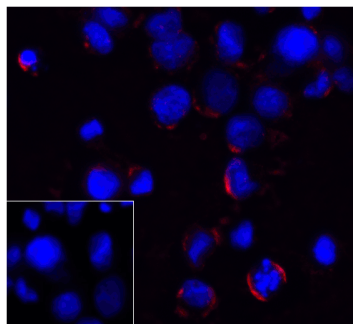
Western blot analysis of PD-1 in transfected 293 cell lysate with PD-1 antibody at (A) 0.25 and (B) 0.5 ug/mL.



Immunohistochemistry of PD-1 in (A) human tonsil tissue



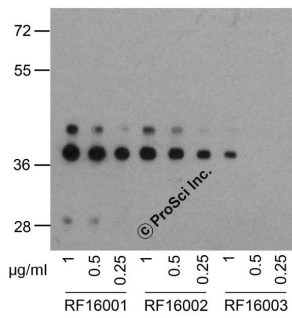
Immunocytochemistry of PD-1 in transfected 293 cells with PD-1 antibody at 5 ug/mL. Lower left: Immunocytochemistry in transfected 293 cells with control mouse IgG antibody at 5 ug/mL.



Immunofluorescence of PD-1 in transfected 293 cells with PD-1 antibody at 5 ug/mL. Lower left: Immunofluorescence in transfected 293 cells with control mouse IgG antibody at 5 ug/mL.

Red: PD1 Antibody [4D6] (RF16001)
Blue: DAPI staining

Western blot analysis of PD-1 in overexpressing 293 cells using M00178-4



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