

Anti-PD-1 PDCD1 Antibody

Catalog Number: A00178-2

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 PD1-null mice who exhibit hyperactivated immune systems and autoimmune diseases.

Overview

Product Name	Anti-PD-1 PDCD1 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PD-1 PDCD1 Antibody (Catalog # A00178-2). Tested in ELISA, WB, IHC-P, IF applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, IF, IHC-P, WB
Clonality	Polyclonal
Formulation	PD-1 Antibody is supplied in PBS containing 0.02% sodium azide.
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	Rabbit
Uniprot ID	Q15116

Technical Details

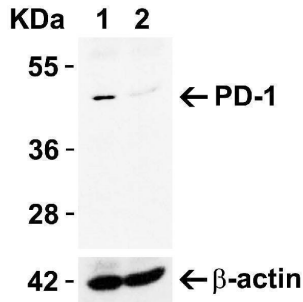
Immunogen	Anti-PD-1 antibody was raised against a peptide corresponding to 16 amino acids near the carboxy terminus of human PD-1. The immunogen is located within amino acids 210-260 of PD-1.
Predicted Reactive Species	Chicken, Pig
Isotype	IgG
Form	Liquid
Concentration	1 mg/mL
Purification	PD-1 Antibody is affinity chromatography purified via peptide column.

Suggested Dilutions

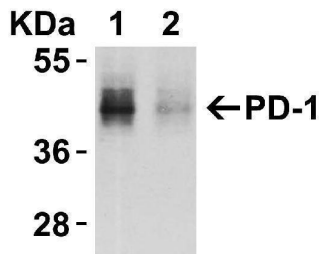
WB: 1-4 ug/mL; IHC: 2.5-5 ug/mL; IF: 20 ug/mL.

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

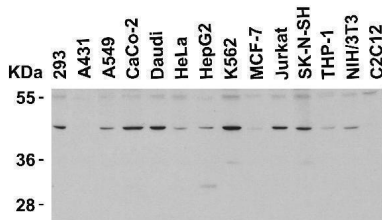
Anti-PD-1 PDCD1 Antibody (A00178-2) Images



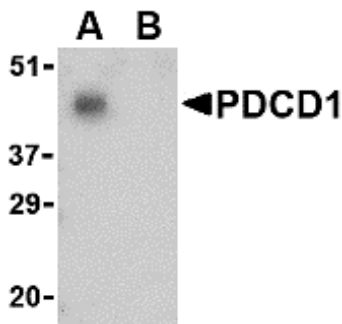
KO Validation in HeLa Cells Loading: 10 ug of HeLa WT cell lysates or PD-1 KO cell lysates. Antibodies: PD-1, A00178-2 (4 ug/mL) and beta-actin 3779 (1 ug/mL), 1 h incubation at RT in 5% NFDm/TBST. Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.



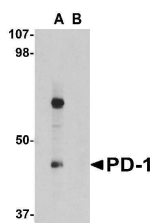
KD Validation in HeLa Cells Loading: 10 ug of HeLa WT cell lysates or PD-1 KD cell lysates. Antibodies: PD-1, A00178-2 (4 ug/mL) and beta-actin 3779 (1 ug/mL), 1 h incubation at RT in 5% NFDm/TBST. Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.



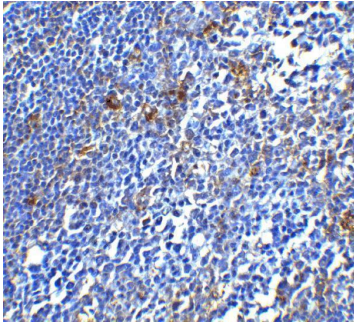
Western Blot Validation in Human and Mouse Cell Lines Loading: 15 ug of lysates per lane. Antibodies: PD-1 A00178-2 (4 ug/mL), 1h incubation at RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



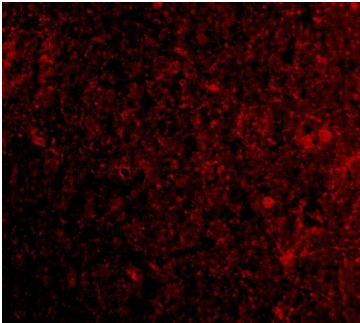
Western Blot Validation in THP-1 Cell Lysate in the (A) absence and (B) presence of blocking peptide Loading: 15 ug of lysates per lane. Antibodies: PD-1, A00178-2 (1 ug/mL), 1h incubation at RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



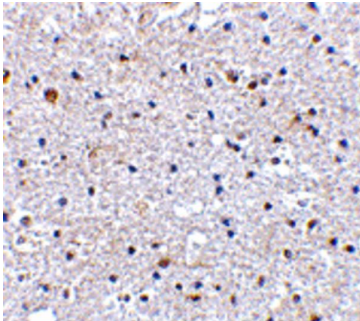
Western Blot Validation in Rat Thymus Cell Lysate Loading: 15 ug of lysates per lane. Antibodies: PD-1 A00178-2 (1 ug/mL), 1h incubation at RT in 5% NFDm/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Immunohistochemistry Validation of PD-1 in Human Tonsil Tissue Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-PD-1 antibody (A00178-2) at 5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



Immunohistochemistry Validation of PD-1 in Human Tonsil Tissue Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-PD-1 antibody (A00178-2) at 5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



Immunohistochemistry Validation of PD-1 in Human Brain Tissue Immunohistochemical analysis of paraffin-embedded human brain tissue using anti-PD-1 antibody (A00178-2) at 2.5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.

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Anti-PD-1 PDCD1 Antibody

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