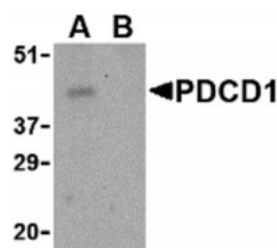


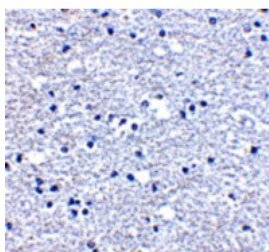


PD-1 Antibody

CATALOG NUMBER: 4067



Western blot analysis of PD-1 in THP-1 cell lysate with PD-1 antibody at 1 ug/mL in the (A) absence and (B) presence of blocking peptide.



Immunohistochemistry of PD-1 in human brain tissue with PD-1 antibody at 5 ug/mL.

Specifications

SPECIES REACTIVITY:	Human, Mouse, Rat
TESTED APPLICATIONS:	ELISA, IHC-P, WB
APPLICATIONS:	PD-1 antibody can be used for detection of PD-1 by Western blot at 1 ug/mL. Antibody can also be used for immunohistochemistry starting at 5 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1208 - THP-1 Cell Lysate
PREDICTED MOLECULAR WEIGHT:	Predicted: 32 kDa Observed: 43 kDa
IMMUNOGEN:	PD-1 antibody was raised against a 16 amino acid synthetic peptide from near the center of human PD-1. The immunogen is located within amino acids 120 - 170 of PD-1.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	PD-1 Antibody is affinity chromatography purified via peptide column.
PHYSICAL STATE:	Liquid
BUFFER:	PD-1 Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	PD-1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	PD-1 Antibody: PD1, PD-1, CD279, SLEB2, hPD-1, hPD-I, hSLE1, PD1, Programmed cell death protein 1, Protein PD-1
ACCESSION NO.:	Q15116
PROTEIN GI NO.:	145559515
OFFICIAL SYMBOL:	PDCD1
GENE ID:	5133

Background

BACKGROUND:	PD-1 Antibody: 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.
REFERENCES:	1) Holling TM, Schooten E, and van Den Elsing PJ. Function and regulation of MHC class II molecules in T-lymphocytes: of mice and men. Hum. Immunol. 2004; 65:282-90.
	2) Ishida Y, Agata Y, Shibahara K, et al. Induced expression of PD-1, a novel member of the immunoglobulin gene superfamily, upon programmed cell death. EMBO J. 1992; 11:3887-95.
	3) Zhong X, Bai C, Gao W, et al. Suppression of expression and function of negative immune regulator PD-1 by certain pattern recognition and cytokine receptor signals associated with immune system danger. Int. Immunol. 2004; 16:1181-8.
	4) Nishimura H, Nose M, Hiai H, et al. Development of lupus-like autoimmune diseases by the disruption of the PD-1 gene encoding an ITIM motif-carrying immunoreceptor. Immunity 1999; 11:141-51.

FOR RESEARCH USE ONLY

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