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Datasheet for 200-301-DK3

PD-1 Antibody [7A11B1]

Overview

Description:	Anti-PD-1 (MOUSE) Antibody - 200-301-DK3
Item No.:	200-301-DK3
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details

Background:	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. Despite its predicted molecular weight, PD-1 often migrates at higher molecular weight in SDS-PAGE.
Synonyms:	PD-1 Antibody [7A11B1] , PD1, PD-1, CD279, SLEB2, hPD-1, hPD-l, hSLE1
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	[7A11B1]
Format:	IgG1

Target Details

Gene Name:	PDCD1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Recombinant Protein

Immunogen:	Anti-PD-1 antibody was produced in mice by repeated immunizations with a ~150 amino acid recombinant protein from near the N-terminus of mouse PD-1.
Purity/Specificity:	Anti-PD-1 Monoclonal Antibody was Protein A purified. Cross reactivity with PD-1 [7A11B1] from other sources has not been determined.
Relevant Links:	• UniProtKB - Q15116 • GeneID - 5133 • NCBI - Q15116

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-PD-1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry-P, and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 32 kDa in Western Blots of specific cell lysates and tissues. WB validated in mouse samples, IHC and IF validated in human and mouse samples. All other applications and species not yet tested. Positive control: PD-1 Recombinant Protein.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	1 µg/mL

Formulation

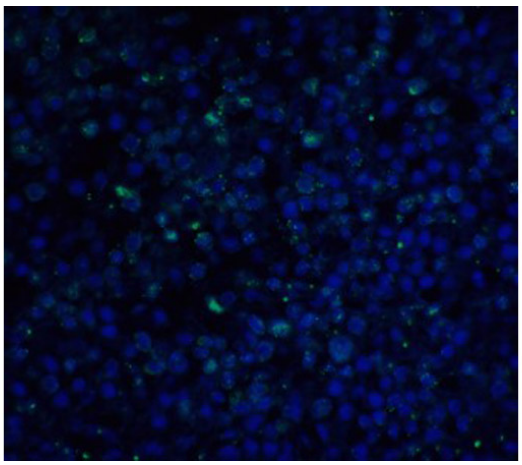
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

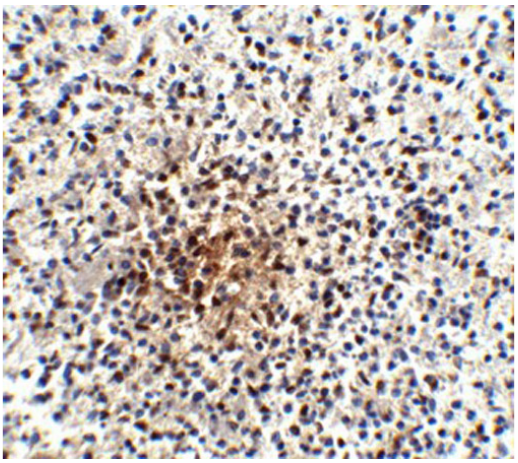
Shipping Condition:	Wet Ice

Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Expiration:	Expiration date is one (1) year from date of receipt.

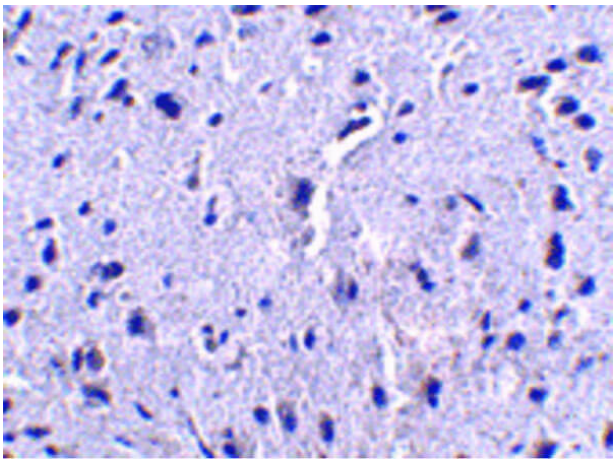
Images



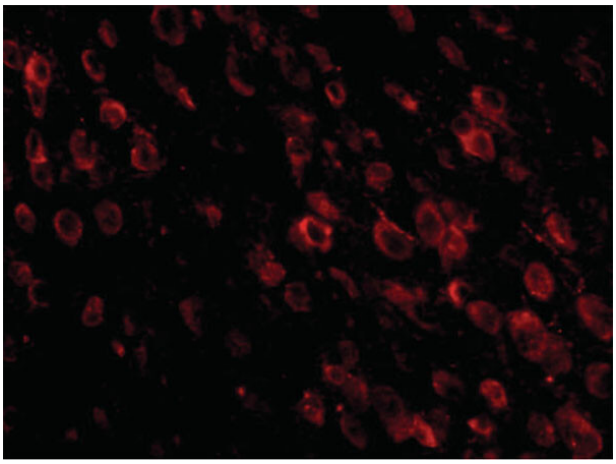
Immunofluorescence Microscopy
Immunofluorescence of PD-1.
Tissue: human spleen tissue.
Primary Antibody: PD-1 antibody at 20 µg/ml.
Staining: PD-1 Antibody [green], DAPI staining [blue].



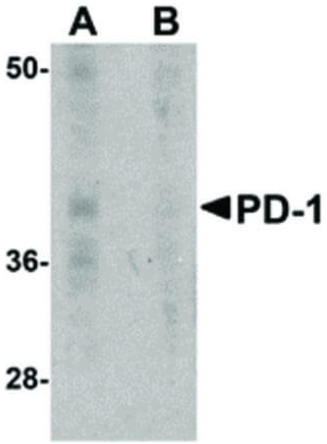
Immunohistochemistry
Immunohistochemistry of PD-1.
Tissue: human spleen tissue.
Primary Antibody: PD-1 antibody at 25 µg/ml.



Immunohistochemistry
Immunohistochemistry of Mouse anti-PD-1 antibody. Tissue: mouse brain. Primary antibody: PD-1 antibody at 2.5 µg/mL. Secondary antibody: Peroxidase mouse secondary antibody. Localization: PD-1 is located on the membrane.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of Mouse anti-PD-1 antibody. Tissue: mouse brain. Primary antibody: PD-1 antibody at 20 µg/mL. Secondary antibody: Peroxidase mouse secondary antibody at 1:20,000. Localization:PD-1 is located on the membrane. Staining: PD-1 as red fluorescent signal.



Western Blot
Western Blot of Mouse anti-PD-1 antibody. Lane A: A-20 cell lysate in absence of blocking recombinant protein. Lane B: A-20 cell lysate in the presence of blocking recombinant protein. Primary antibody: PD-1 antibody at 1 µg/mL overnight at 4℃. Secondary antibody: Mouse HRP secondary antibody. Block: 5% BLOTTO. Predicted/Observed size: 31 kDa, 39 kDa for PD-1.

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