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Datasheet for 600-401-DK2

PD-1 Antibody

Overview

Description:	Anti-PD-1 (RABBIT) Antibody - 600-401-DK2
Item No.:	600-401-DK2
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

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.
Synonyms:	PD-1 Antibody, PD1, PD-1, CD279, SLEB2, hPD-1, hPD-l, hSLE1, PD1, Programmed cell death protein 1, Protein PD-1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PDCD1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-PD-1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the internal region of human PD-1.
Purity/Specificity:	Anti-PD-1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with PD-1 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q15116 • GeneID - 5133 • NCBI - EDL39922

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-PD-1 Antibody has been tested for use in ELISA, Western Blotting, Immunofluorescence, and Immunohistochemistry. Expect a band at approximately 32 kDa in Western Blots using positive control THP-1 whole cell lysate, Human brain tissue for IHC, or other specific cell lysates and tissues. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IF:	10 µg/mL
IHC:	5 µg/mL
WB:	1 µg/mL

Formulation

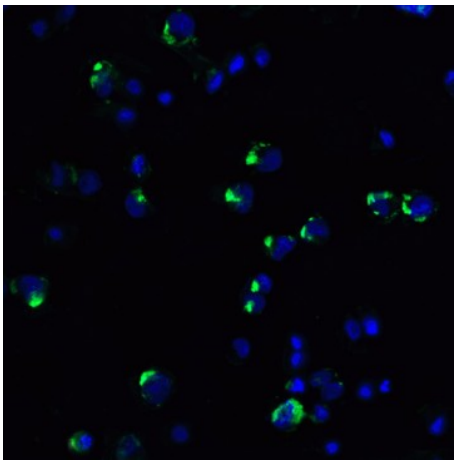
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

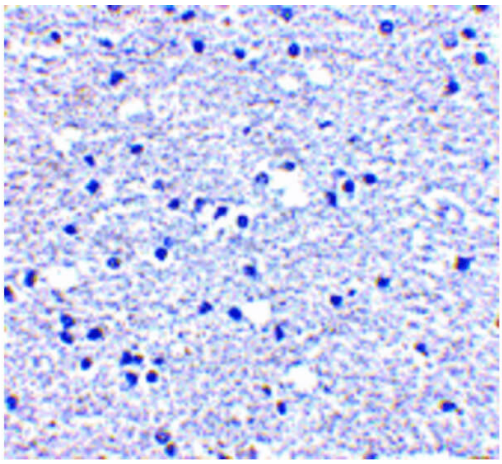
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

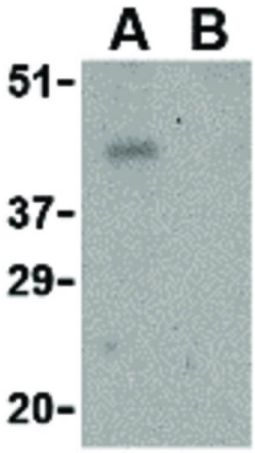
Images



Immunofluorescence Microscopy
Immunofluorescence of PD-1 in PD-1-transfected HEK293 cells with PD-1 antibody at 20 µg/ml.
Green: PD-1 Antibody.
Blue: DAPI staining.



Immunohistochemistry
Immunohistochemistry of PD-1 antibody. Tissue: Human brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: PD-1 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: PD-1 is nuclear and occasionally cytoplasmic. Staining: PD-1 as precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blot

Western Blot of PD-1 (PDCD1) antibody. Lane A: THP-1 cell lysate at 1 µg/mL in the absence of blocking peptide. Lane B: THP-1 cell lysate at 1 µg/mL in the presence of blocking peptide. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 31.6 kDa, ~42 kDa for PD-1 (PDCD1).

Disclaimer

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