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Datasheet for 600-401-A72

PDCD1 Antibody

Overview

Description:	Anti-PDCD1 (RABBIT) Antibody - 600-401-A72
Item No.:	600-401-A72
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 th 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 PDCD-1 that mediate inhibitory signals from the APC. PDCD-1 can bind two different but related ligands, PDL-1 and PDL-2. Upon binding to either of these ligands, signals generated by PDCD1 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 PDCD1-null mice who exhibit hyperactivated immune systems and autoimmune diseases. Despite its predicted molecular weight, PDCD1 often migrates at higher molecular weight in SDS-PAGE.
Synonyms:	PD1 antibody, PDCD 1 antibody, CD279 antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

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

Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a region near the carboxy terminus of human PDCD1 protein.
Purity/Specificity:	This affinity purified antibody is directed against human PDCD1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with PDCD1 from human, mouse and rat sources. Reactivity with PDCD1 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q15116 • NCBI - NP_005009.2 • GeneID - 5133

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	This Anti-PDCD1 antibody has been tested for use in ELISA, immunofluorescence, immunohistochemistry, and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~47 kDa in size corresponding to PDCD1 by western blotting in the appropriate cell lysate or extract. THP-1 cell lysate can be used as positive control.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:40,000
IF:	20 µg/mL
IHC:	5.0 µg/mL
WB:	0.5 - 1.0 µg/mL

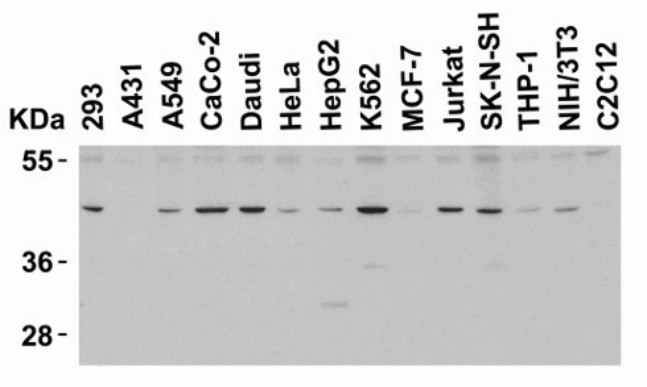
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

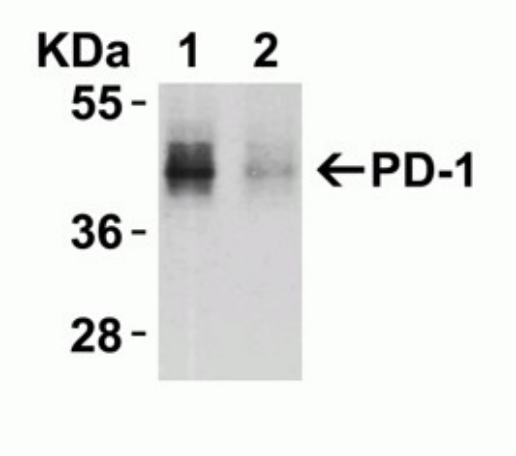
Shipping & Handling

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.

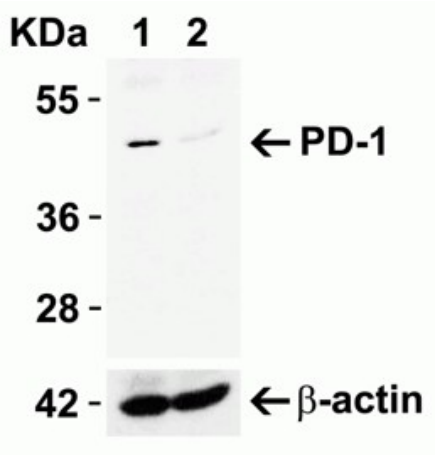
Images



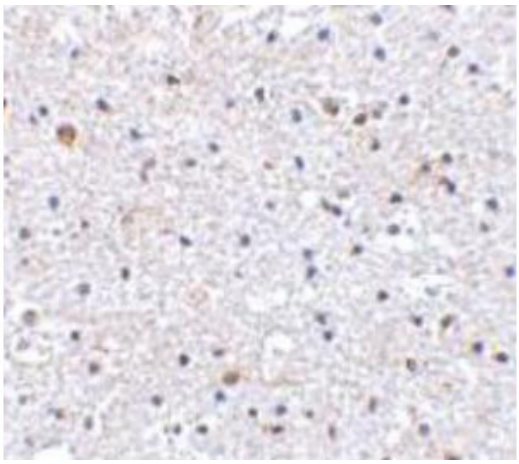
Western Blot
Western Blot Validation. Loading: 15 µg of human and mouse cell line lysates per lane.
Antibodies: PDCD1 (4 µg/mL), 1h incubation at RT in 5% NFDM/TBST.
Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



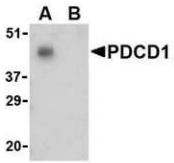
Western Blot
KD Validation. Loading: 10 µg of HeLa WT cell lysates or PDCD1 KD cell lysates. Antibodies: PDCD1, (4 µg/mL) and beta-actin (1 µg/mL), 1 h incubation at RT in 5% NFDM/TBST.
Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.



Western Blot
KO Validation. Loading: 10 µg of HeLa WT cell lysates or PDCD1 KO cell lysates. Antibodies: PDCD1, (4 µg/mL) and beta-actin (1 µg/mL), 1 h incubation at RT in 5% NFDM/TBST. Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.



Immunohistochemistry
Immunohistochemistry showing detection of human PDCD1 in brain tissue using a primary antibody dilution of 2.5 µg/mL.



Western Blot
Western blot using Rockland's affinity purified anti-PDCD1 antibody shows detection of a predominant band at ~47 kDa corresponding to PDCD1 (arrowhead) in THP-1 whole cell lysate. The predicted MW of PDCD1 is 32 kDa. PDCD1 was probed in the absence (lane A) and presence (lane B) of blocking peptide.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.