

Ready-To-Use Anti-Pdcd4 (RABBIT) Antibody

Ready-To-Use Pdcd4 Antibody Catalog # ASR5373

Specification

Ready-To-Use Anti-Pdcd4 (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate Unconjugated **Target Species** Human Reactivity Human

Clonality **Polyclonal** Application WB, IHC, E, IP, I, LCI

Application Note Ready-To-Use Anti-Pdcd4 antibody has

been optimized and validated in western

blot using 1:1000 dilution. This

Anti-SMAD3 (RTU) Antibody is sufficient to

run 10 western blots. Expect a band

approximately 52 kDa in size

corresponding to Pdcd4 protein by western blotting in the appropriate cell lysate or extract. Although not tested, this antibody

is likely functional in ELISA, immunoprecipitation, and

immunohistochemistry. Optimal titers for these applications should be determined

by the researcher. **Liquid (sterile filtered)**

0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

This affinity purified antibody was Immunogen

prepared from whole rabbit serum

produced by repeated immunizations with a synthetic peptide corresponding amino acids near the carboxyl terminus of human

Pdcd4 protein.

Stabilizer 0.01% Bovine Serum Albumin (BSA), 25%

(v/v) Glycerol

Preservative 0.01% (w/v) Sodium Azide

Ready-To-Use Anti-Pdcd4 (RABBIT) Antibody - Additional Information

Gene ID 27250

Physical State

Buffer

Other Names 27250

RTU Anti-Pdcd4 affinity purified antibody is directed against human Pdcd4 protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with Pdcd4 from human, mouse, rat and Xenopus



based on 100% homology with the immunizing sequence. Cross-reactivity with Pdcd4 from other sources has not been determined. The antibody reacts with Pdcd4 protein that is either phosphorylated or non-phosphorylated at Ser457.

Storage Condition

Store vial at 2-8° C prior to opening. May 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. Dilute only prior to use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Ready-To-Use Anti-Pdcd4 (RABBIT) Antibody - Protein Information

Name PDCD4

Synonyms H731

Function

Inhibits translation initiation and cap-dependent translation. May excert its function by hindering the interaction between EIF4A1 and EIF4G. Inhibits the helicase activity of EIF4A. Modulates the activation of JUN kinase. Down-regulates the expression of MAP4K1, thus inhibiting events important in driving invasion, namely, MAPK85 activation and consequent JUN-dependent transcription. May play a role in apoptosis. Tumor suppressor. Inhibits tumor promoter-induced neoplastic transformation. Binds RNA (By similarity).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q61823}. Cytoplasm {ECO:0000250|UniProtKB:Q61823}. Note=Shuttles between the nucleus and cytoplasm (By similarity). Predominantly nuclear under normal growth conditions, and when phosphorylated at Ser-457 (PubMed:16357133)

Tissue Location

Up-regulated in proliferative cells. Highly expressed in epithelial cells of the mammary gland. Reduced expression in lung cancer and colon carcinoma.

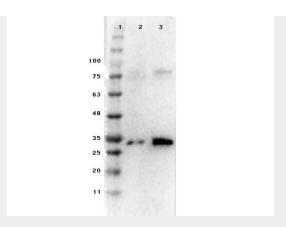
Ready-To-Use Anti-Pdcd4 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Ready-To-Use Anti-Pdcd4 (RABBIT) Antibody - Images





Western Blot Results of Ready to Use Rabbit Anti-Pdcd4 Antibody. Lane 1: Opal Pre-stained Molecular Weight Ladder (p/n MB-210-0500). Lane 2: HEK293T WC lysate (p/n W09-001-GX5). Lane 3: HeLa WC Lysate (p/n W09-000-364). Load: 10 μ L. Primary Antibody: Ready to Use Rabbit Anti-Pdcd4 Antibody 1:1000 overnight at 4°C. Secondary Antibody: Goat Anti-Rabbit HRP (p/n 611-103-122) at 1:70,000 for 30 min RT. Block: BlockOut Buffer (p/n MB-073). Expect: ~52 kDa. Observed: ~35kDa.

Ready-To-Use Anti-Pdcd4 (RABBIT) Antibody - Background

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Programmed cell death 4 (Pdcd4) is a novel tumor suppressor. Pdcd4 directly inhibits the helicase activity of eukaryotic translation initiation factor 4A (eIF4A), a component of the translation initiation complex. Pdcd4 also suppresses the transactivation of activator protein-1 (AP-1)-responsive promoters by c-Jun. Pdcd4 contains two Akt phosphorylation sites, one at Ser67 and the other at Ser457. The phosphorylation of Pdcd4 by Akt causes nuclear translocation of Pdcd4 and a significant decrease in the ability of Pdcd4 to interfere with the transactivation of AP-1-responsive promoters by c-Jun. All Rockland Immunochemical's Pdcd4 antibodies are affinity-purified to assure both high affinity and specificity. Rigorous quality control testing ensures that the finished product meets or exceeds out high standards for optimum performance in your assays.