

**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.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was 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**Other Names**  
27250**Purity**

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 Pdc4 from other sources has not been determined. The antibody reacts with Pdc4 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-Pdc4 (RABBIT) Antibody - Protein Information**

**Name** PDCD4

**Synonyms** H731

**Function**

Inhibits translation initiation and cap-dependent translation. May exert 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)

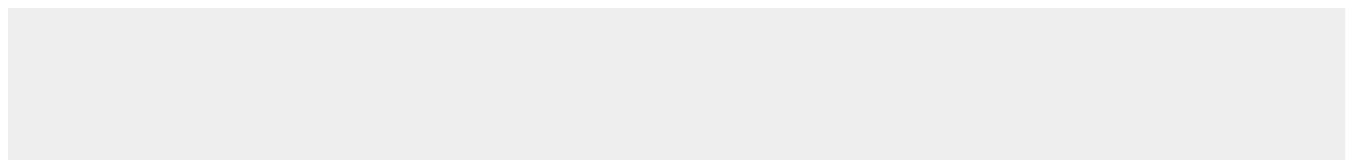
**Tissue Location**

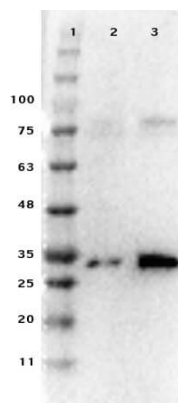
Up-regulated in proliferative cells. Highly expressed in epithelial cells of the mammary gland. Reduced expression in lung cancer and colon carcinoma.

**Ready-To-Use Anti-Pdc4 (RABBIT) Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Ready-To-Use Anti-Pdc4 (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  $\mu$ 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.