

**Anti-Pdcd4 (RABBIT) Antibody**  
**Pdcd4 Antibody**  
**Catalog # ASR5372****Specification**

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**Anti-Pdcd4 (RABBIT) Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human, Mouse
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	This affinity purified antibody has been tested for use in ELISA, western blotting, immunoprecipitation and immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 52 kDa in size corresponding to Pdcd4 protein by western blotting in the appropriate cell lysate or extract.
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.
Preservative	0.01% (w/v) Sodium Azide

**Anti-Pdcd4 (RABBIT) Antibody - Additional Information****Gene ID** 27250**Other Names**  
27250**Purity**

This 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 -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.

#### **Precautions Note**

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

### **Anti-Pdcd4 (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**

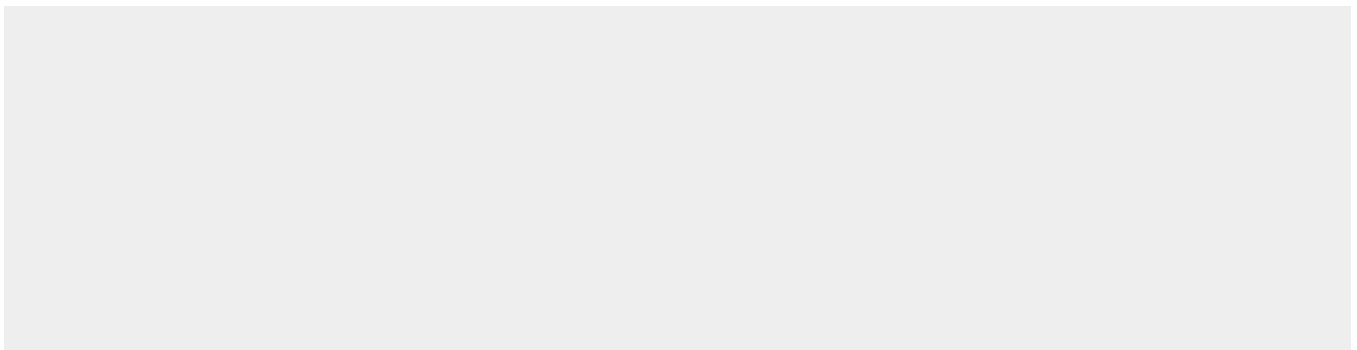
Up-regulated in proliferative cells. Highly expressed in epithelial cells of the mammary gland. Reduced expression in lung cancer and colon carcinoma.

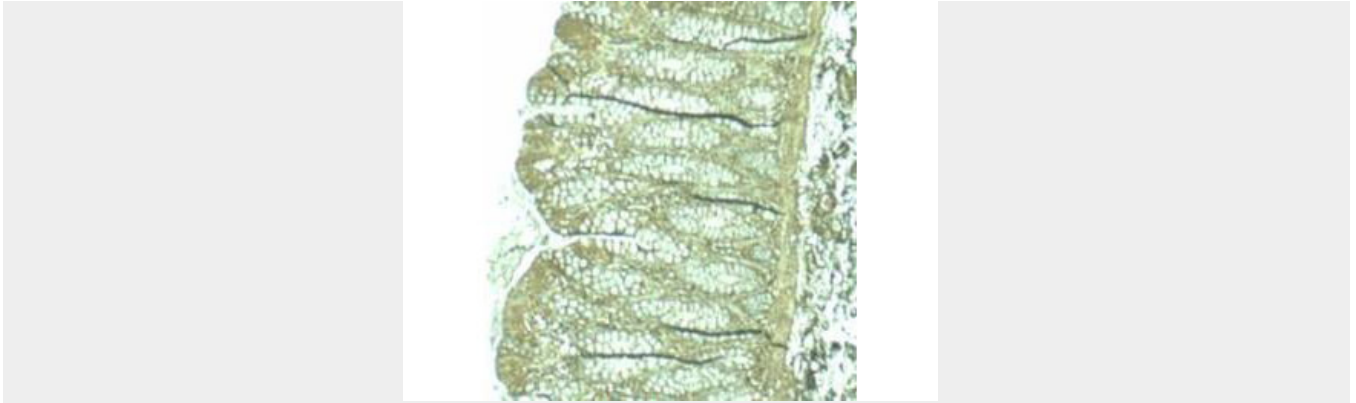
### **Anti-Pdcd4 (RABBIT) Antibody - Protocols**

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](#)

### **Anti-Pdcd4 (RABBIT) Antibody - Images**





Affinity purified anti-Pdc4 was used at a 1:100 dilution to detect Pdc4 by immunohistochemistry on mouse colon tissue. Tissue was fixed in 4% paraformaldehyde and paraffin embedded. Tissue sections were deparaffinized and treated by trypsinization before staining. Personal Communication. M Young, NCI, Bethesda, MD.

#### **Anti-Pdc4 (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 (Pdc4) is a novel tumor suppressor. Pdc4 directly inhibits the helicase activity of eukaryotic translation initiation factor 4A (eIF4A), a component of the translation initiation complex. Pdc4 also suppresses the transactivation of activator protein-1 (AP-1)-responsive promoters by c-Jun. Pdc4 contains two Akt phosphorylation sites, one at Ser67 and the other at Ser457. The phosphorylation of Pdc4 by Akt causes nuclear translocation of Pdc4 and a significant decrease in the ability of Pdc4 to interfere with the transactivation of AP-1-responsive promoters by c-Jun.