

Anti-Pdcd4 (RABBIT) Antibody

Pdcd4 Antibody Catalog # ASR5372

Specification

Anti-Pdcd4 (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate Unconjugated Target Species Human

Reactivity
Clonality
Application
Human, Mouse
Polyclonal
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.

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 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.

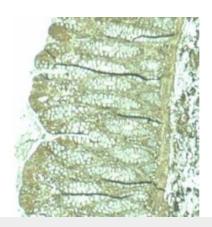
Anti-Pdcd4 (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Pdcd4 (RABBIT) Antibody - Images





Affinity purified anti-Pdcd4 was used at a 1:100 dilution to detect Pdcd4 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-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.