

Anti-Pdcd4 pS457 (MOUSE) Monoclonal Antibody
Pdcd4 phospho S457 Antibody
Catalog # ASR4171**Specification**

Anti-Pdcd4 pS457 (MOUSE) Monoclonal Antibody - Product Information

Host	Mouse
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human, Mouse
Clonality	Monoclonal
Application	WB, IHC, E, I, LCI
Application Note	Pdcd4 phospho S457 Antibody is tested by ELISA, immunohistochemistry, and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 62 kDa in size corresponding to phosphorylated Pdcd4 protein by western blotting in the appropriate cell lysate or extract. This phospho-specific monoclonal antibody reacts with human Pdcd4 pS457 and shows minimal reactivity by ELISA against the non-phosphorylated form of the immunizing peptide.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This monoclonal antibody was produced by repeated immunizations with a synthetic peptide corresponding to residues surrounding Ser457 of the human Pdcd4 protein.
Preservative	0.01% (w/v) Sodium Azide

Anti-Pdcd4 pS457 (MOUSE) Monoclonal Antibody - Additional Information**Gene ID** 27250**Other Names**
27250**Purity**

Pdcd4 phospho S457 Antibody was purified from concentrated tissue culture supernate by Protein A chromatography. This antibody is specific for human Pdcd4 protein phosphorylated at Ser457. 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.

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 pS457 (MOUSE) Monoclonal 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

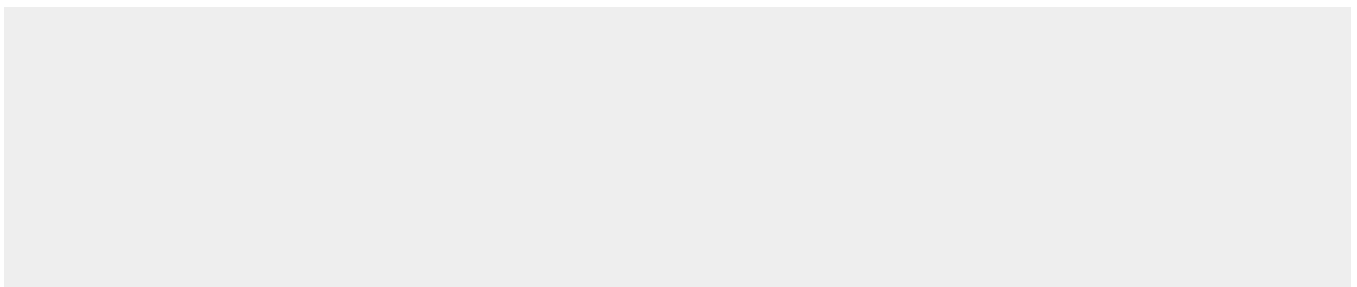
Up-regulated in proliferative cells. Highly expressed in epithelial cells of the mammary gland. Reduced expression in lung cancer and colon carcinoma.

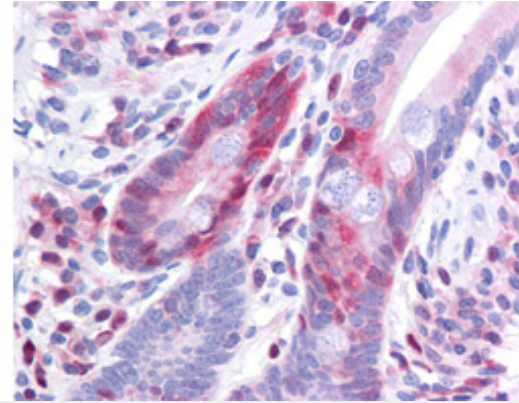
Anti-Pdcd4 pS457 (MOUSE) Monoclonal Antibody - Protocols

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 pS457 (MOUSE) Monoclonal Antibody - Images





Rockland Antibody 200-301-964 has been tested in immunohistochemistry, analyzed by an anatomic pathologist and validated for use in IHC applications against formalin-fixed, paraffin-embedded human tissues. The antibody was serially diluted and tested at a range of concentrations on at least 22 different human formalin-fixed, paraffin archival tissues, and positive and negative tissues were scored and compared to the published literature on the expression and function of the gene. A representative image from positively stained small intestine shows the localization of the anti Pdc4 antibody as the precipitated red signal, with a hematoxylin purple nuclear counterstain. Image provided courtesy of LifeSpan Biosciences, Seattle, WA

Anti-Pdc4 pS457 (MOUSE) Monoclonal Antibody - Background

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.