10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Pdcd4 pS457 (MOUSE) Monoclonal Antibody

Pdcd4 phospho S457 Antibody
Catalog # ASR4190

Specification

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

Host	**Mouse**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Application	**WB, IHC, E, I, LCI**
Application Note	**Anti-PDCD4 pS457 monoclonal antibody has been tested by ELISA and western blotting and is suitable for immunohistochemistry. 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	**Anti-Pdcd4 phospho S457 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 Pdcd4 phospho S457 Antibody 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 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 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 Cytomety
- Cell Culture

Anti-Pdcd4 pS457 (MOUSE) Monoclonal Antibody - Images

Anti-Pdcd4 pS457 (MOUSE) Monoclonal Antibody - Background

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 phosphoryl-ation 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. Ideal for researchers involved in Cell Signaling, Cancer and Signal Transduction research.