

Datasheet for ABIN964683

anti-PDCD4 antibody (pSer457)**3** Images**1** Publication[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	PDCD4
Binding Specificity:	pSer457
Reactivity:	Human, Mouse, Rat, Xenopus laevis
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PDCD4 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	This monoclonal antibody was produced by repeated immunizations with a synthetic peptide corresponding to residues surrounding Ser457 of the human Pdc4 protein. Immunogen Type: Peptide
Clone:	9G6
Isotype:	IgG1 kappa
Specificity:	Pdc4 phospho S457 Antibody was purified from concentrated tissue culture supernate by Protein A chromatography. This antibody is specific for human Pdc4 protein phosphorylated at Ser457. A BLAST analysis was used to suggest cross-reactivity with Pdc4 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.
Cross-Reactivity:	Mouse (Murine), Rat (Rattus), Xenopus laevis

Product Details

Characteristics:	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.
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Sterility:	Sterile filtered
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Target Details

Target:	PDCD4
Alternative Name:	Pdcd4 (PDCD4 Products)
Background:	<p>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.</p> <p>Synonyms: Death up-regulated gene protein antibody, Dug antibody, H731 antibody, Ma3 antibody, Neoplastic transformation inhibitor antibody, Neoplastic transformation inhibitor protein antibody, Nuclear antigen H731 antibody</p>

Gene ID:	27250, 21735596
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UniProt:	Q53EL6
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Application Details

Application Notes:	Pdcd4 phospho S457 Antibody is suitable for 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.
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Comment:	Gene Name: PDCD4
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Application Details

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1.0 mg/mL

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: Sodium azide

Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

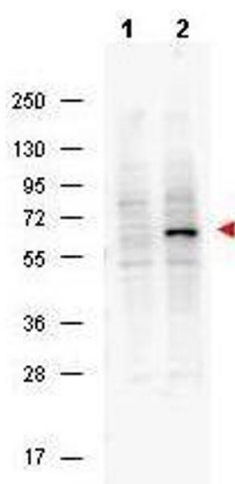
Storage: 4 °C/-20 °C

Storage Comment: Store vial at 4 °C prior to restoration. For extended storage aliquot contents and freeze at -20 °C or below. 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. Expiration date is one (1) year from date of opening.

Expiry Date: 12 months

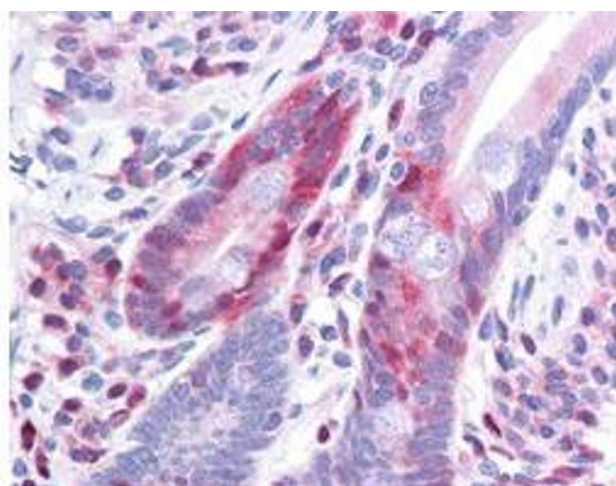
Publications

Product cited in: Huang, Wu, Loeb, Hsu, Heidersbach, Brincat, Horiuchi, Lebbink, Mo, Goga, McManus: "Up-regulation of miR-21 by HER2/neu signaling promotes cell invasion." in: **The Journal of biological chemistry**, Vol. 284, Issue 27, pp. 18515-24, (2009) ([PubMed](#)).



Western Blotting

Image 1. Western blot using Protein A purified Mouse Monoclonal anti-Pdc4 pS457 antibody shows detection of phosphorylated Pdc4 (indicated by arrowhead at ~62 kDa) in NIH-3T3 cells after 5 min treatment with 30 ng/mL PDGF (lane 2). No reactivity is seen for unstimulated (non-phosphorylated) NIH 3T3 cells (lane 1). The membrane was probed with the primary antibody at a 1:2,000 dilution, overnight at 4° C. For detection HRP conjugated Rb-a-Mouse IgG was used at a 1:20,000 dilution in blocking buffer for 1 h at 4° C followed by visualization using a imaging system (UVP).



Immunohistochemistry

Image 2. 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



Western Blotting

Image 3. Western blot using Immunochemicals Protein A purified Mouse Monoclonal anti-Pdcd4 pS457 antibody against recombinant PDCD4 protein. Membrane was blocked in 1% BSA-TBS-T for 30 min RT and probed with 1° Ab Ms-A-Pdcd4pS457 1:1000 (o/n 4°C in 1% BSA-TBS-T) followed by 2° Ab Peroxidase Conjugated Rabbit anti Ms CUST10M Lot# 20121 at 1:40,000 in ABIN925618 30 min RT. Bands at ~62 kD and ~32 kD were detected.