

Datasheet for ABIN129708

anti-PDCD4 antibody (pSer457)

14 Images

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Overview

Quantity:	100 µg
Target:	PDCD4
Binding Specificity:	pSer457
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Purpose:	Pdcd4 phospho S457 Antibody
Immunogen:	<p>Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids surrounding Ser457 in the human Pdcd4 protein.</p> <p>Immunogen Type: Conjugated Peptide</p>
Isotype:	IgG
Cross-Reactivity (Details):	This antibody is specific for human Pdcd4 protein phosphorylated at Ser457.
Characteristics:	<p>Synonyms: rabbit anti-PDCD4 pS457 antibody, PDCD-4, PDCD 4, Programmed cell death protein 4, 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, Protein 197/15a</p>
Purification:	This product was affinity purified from monospecific antiserum by immunoaffinity

Product Details

chromatography using phospho-peptide coupled to agarose beads followed by solid phase adsorption against nonphospho-peptide.

Sterility: Sterile filtered

Target Details

Target: PDCD4

Alternative Name: PDCD4 ([PDCD4 Products](#))

Background: Background: This antibody is designed, produced, and validated as part of a collaboration with 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.

Gene ID: 27250, 21735596

UniProt: [Q53EL6](#)

Application Details

Application Notes: Immunohistochemistry Dilution: 21.25 - 2.5 µg/mL
Application Note: This affinity purified antibody has been tested for use in ELISA, immunohistochemistry, and western blotting. Specific conditions for reactivity should be optimized by the end user. By western blot, a band approximately 52 kDa in size corresponding to Pdc4 protein is expected in the appropriate cell lysate or extract.
Western Blot Dilution: 1:500 - 1:2,000
ELISA Dilution: 1:400,000
Other: User Optimized

Restrictions: For Research Use only

Handling

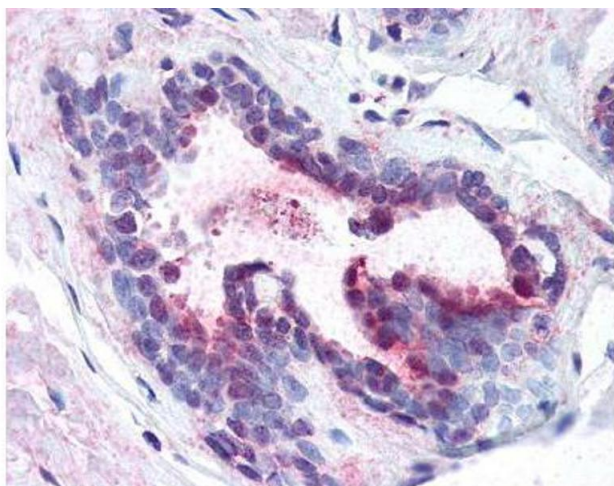
Format: Liquid

Handling

Concentration:	0.95 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
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 -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.
Expiry Date:	12 months

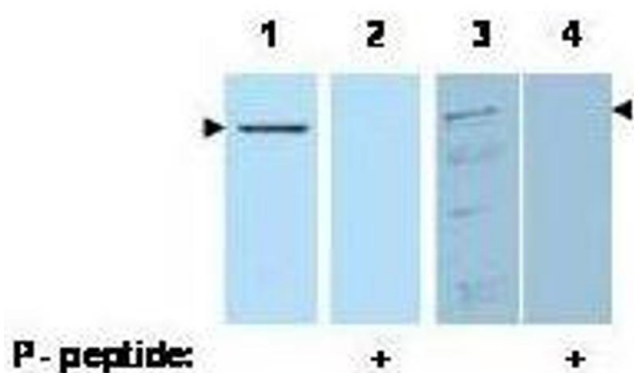
Publications

Product cited in:	<p>Eto, Goto, Nakashima, Ura, Abe: "Loss of programmed cell death 4 induces apoptosis by promoting the translation of procaspase-3 mRNA." in: Cell death and differentiation, (2011) (PubMed).</p> <p>Reis, Tomenson, Cervigne, Machado, Jurisica, Pintilie, Sukhai, Perez-Ordenez, Grénman, Gilbert, Gullane, Irish, Kamel-Reid: "Programmed cell death 4 loss increases tumor cell invasion and is regulated by miR-21 in oral squamous cell carcinoma." in: Molecular cancer, Vol. 9, pp. 238, (2011) (PubMed).</p> <p>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).</p>
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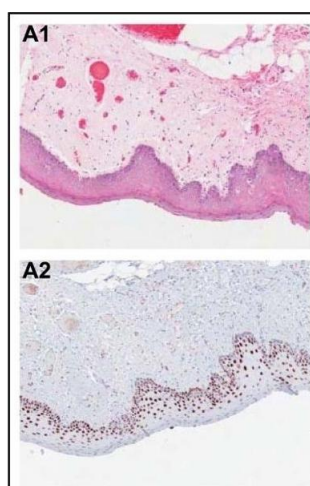
Immunohistochemistry

Image 1. affinity purified anti-Pdcd4 pS457 antibody was used at 1.25 µg/ml to detect signal in a variety of tissues including multi-human, multi-brain and multi-cancer slides. This image shows moderate positive staining of human breast epithelial cells at 40X. Tissue was formalin-fixed and paraffin embedded. The image shows localization of the antibody as the precipitated red signal, with a hematoxylin purple nuclear counterstain.



Western Blotting

Image 2. Western blot using affinity purified anti-Pdcd4 pS457 antibody shows detection of Pdcd4 phosphorylated at Ser 457 (arrowheads). Lanes 1 & 2 each contain 100 ng recombinant Pdcd4. Lanes 3 & 4 each contain 30 µg of whole cell extract from 293 HEK cells treated with 20 nM TPA and MG132 proteasome inhibitor for 8 hours. The signal can be competed off with peptide phosphorylated at Ser 457 (Lanes 2 & 4). Personal Communication, M Young & A Jansen, NCI, Bethesda, MD.



Immunohistochemistry

Image 3. Immunohistochemical analysis of PDCD4 shows the corresponding H&E-stained and PDCD4-stained tissue sections from patients with OSCC. Panels A1, A2, D1, D2 show two adjacent normal epithelium samples with strongly positive, nuclear PDCD4 staining. Panels B1, B2, E1, E2 show two dysplasia samples with positive to weak nuclear PDCD4 staining. Panels C1, C2, F1, F2 show loss of PDCD4 expression in two moderately differentiated OSCCs. Normal, dysplasia and OSCC samples are paired and correspond to two different patients (A-C and D-F, respectively). - figure provided by CiteAb. Source: PMID20831814

Please check the [product details page](#) for more images. Overall 14 images are available for ABIN129708.