

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
Conjugate:	This PDCD4 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

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 Pdc4 protein.
Isotype:	IgG
Cross-Reactivity:	Mouse (Murine), Rat (Rattus), Xenopus laevis
Characteristics:	Concentration Definition: by UV absorbance at 280 nm

Target Details

Target:	PDCD4
Alternative Name:	Pdc4 (PDCD4 Products)

Target Details

Background:	<p>This antibody is designed, produced, 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.</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>
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Gene ID: 27250, 21735596

UniProt: [Q53EL6](#)

Application Details

Application Notes:	<p>This affinity purified antibody has been tested for use in ELISA 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 Pdcd4 protein is expected in the appropriate cell lysate or extract.</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.95 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:	-20 °C

Publications

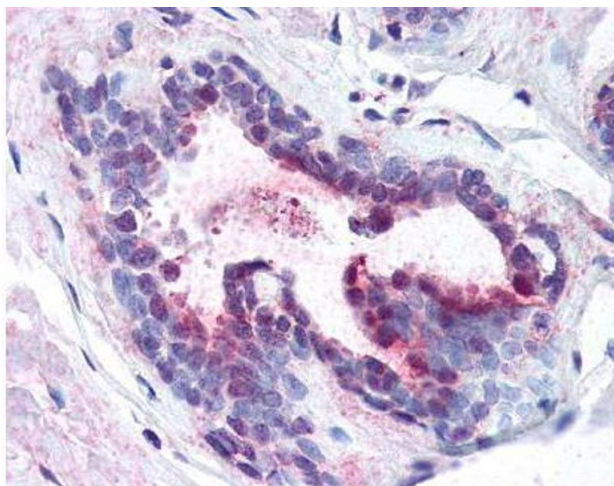
Product cited in: Eto, Goto, Nakashima, Ura, Abe: "Loss of programmed cell death 4 induces apoptosis by

promoting the translation of procaspase-3 mRNA." in: **Cell death and differentiation**, (2011) ([PubMed](#)).

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](#)).

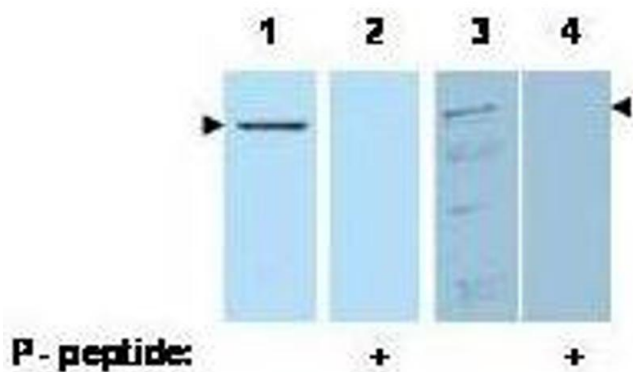
Huang, Wu, Loeb, Hsu, Heidersbach, Brincat, Horiuchi, Lebbink, Mo, Goga, McManus: "Up-regulation of miR-21 by HER2/neu signaling promotes cell invasion." in: **The Journal of biological chemistry**, Vol. 284, Issue 27, pp. 18515-24, (2009) ([PubMed](#)).

Images



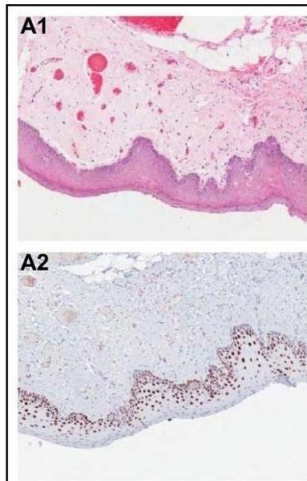
Immunohistochemistry

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.