Datasheet for ABIN129709

anti-PDCD4 antibody (C-Term)

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Overview

Quantity:	100 µg
Target:	PDCD4
Binding Specificity:	C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PDCD4 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunoprecipitation (IP)

Product Details

Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding amino acids near the of human Pdcd4 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:	Pdcd4 (PDCD4 Products)

Target Details

Background:	This antibody is designed, produced, and is suitable for Cancer, Immunology and Nuclear Signaling research. Programmed cell death 4 (Pdcd4) is a novel tumor supressor. 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. 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
Gene ID:	27250, 21735596
UniProt:	Q53EL6

Application Details

Application Notes:	This affinity purified antibody has been tested for use in ELISA, western blotting, immunoprecipitation and immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 52 kDa in size corresponding to Pdcd4 protein by western blotting in the appropriate cell lysate or extract.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1.06 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:	Hill, Nesser, Johnson-Camacho, Jeffress, Johnson, Boniface, Spencer, Lu, Heiser, Lawrence,

Publications

Pande, Korkola, Gray, Mills, Mukherjee, Spellman: "Context Specificity in Causal Signaling Networks Revealed by Phosphoprotein Profiling." in: **Cell systems**, Vol. 4, Issue 1, pp. 73-83.e10, (2019) (PubMed).

Kim, Hu, Jadhav, Jin, Zhang, Cavanagh, Akondy, Ahmed, Weyand, Goronzy: "Activation of miR-21-Regulated Pathways in Immune Aging Selects against Signatures Characteristic of Memory T Cells." in: **Cell reports**, Vol. 25, Issue 8, pp. 2148-2162.e5, (2018) (PubMed).

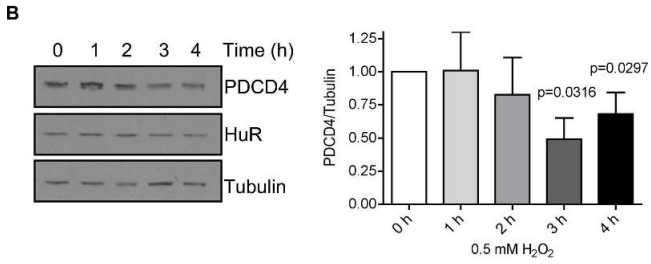
Liwak-Muir, Dobson, Naing, Wylie, Chehade, Baird, Chakraborty, Holcik: "ERK8 is a novel HuR kinase that regulates tumour suppressor PDCD4 through a miR-21 dependent mechanism." in: **Oncotarget**, Vol. 7, Issue 2, pp. 1439-50, (2016) (PubMed).

Sharma, Lin, Farrugia, McLaughlin, Ellis, Brundage, Salkeni, Ruppert: "MicroRNAs 206 and 21 cooperate to promote RAS-extracellular signal-regulated kinase signaling by suppressing the translation of RASA1 and SPRED1." in: **Molecular and cellular biology**, Vol. 34, Issue 22, pp. 4143-64, (2015) (PubMed).

Yang, Yue, Sims, Pfeffer: "The curcumin analog EF24 targets NF-κB and miRNA-21, and has potent anticancer activity in vitro and in vivo." in: **PLoS ONE**, Vol. 8, Issue 8, pp. e71130, (2014) (PubMed).

There are more publications referencing this product on: Product page

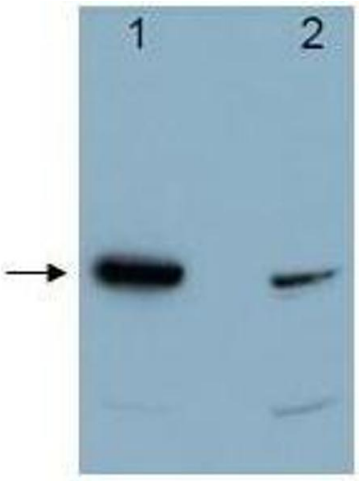
Images



Western Blotting

Image 1. H2O2 causes cytoplasmic accumulation of HuR and a loss in PDCD4 expression that is mediated by miR-21A. HuR localization by immunofluorescence of HeLa cells treated with PBS (0 mM H2O2) or 0.5 mM H2O2 for 1 h. Nuclei are visualized by Hoechst staining. Nuclear/Cytoplasmic ratio of HuR is shown on the right. Higher ratio denotes more nuclear staining. B. Left panel: HeLa cells were treated with 0.5 mM H2O2 for the indicated times and cell lysates analysed by western blot analysis

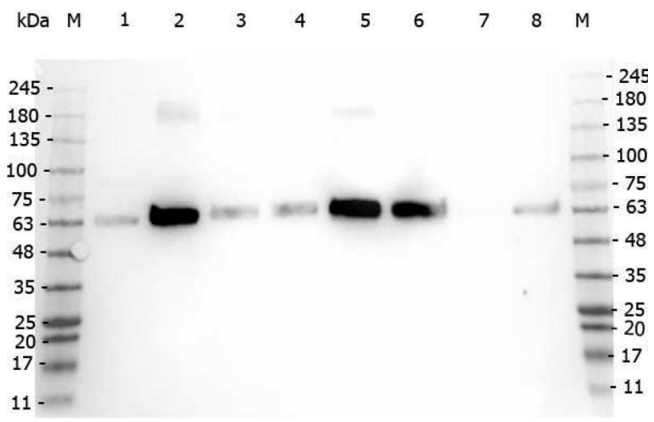
indicating a decrease in PDCD4 protein at 3 h as compared to Tubulin control. Right panel: PDCD4 protein levels were quantified relative to Tubulin. C. Cells were treated with 0.5 mM H2O2 for the indicated time points, total RNA was isolated and analysed by qRT-PCR indicating a loss of PDCD4 mRNA as compared to GAPDH control. D. Left panel: HeLa cells were treated with antimiR-21 or a non-targeting antimiR-CTRL (control) for 24 h followed by treatment with 0.5 mM H2O2 for 4 h. Cells were harvested and analysed by western blot analysis. Tubulin was used as a loading control. Right panel: Quantification of PDCD4 levels relative to Tubulin. E. HeLa cells were treated with 0.5 mM H2O2 or PBS and HuR was immunoprecipitated. Bound RNA was isolated and qRT-PCR was performed to determine levels of PDCD4 mRNA. The levels of HuR-bound PDCD4 in PBS-treated cells were set as 1. - figure provided by CiteAb. Source: PMID26595526



Western Blotting

Image 2. Western blot using affinity purified anti-Pdcd4 antibody shows detection of a band ~52 kDa in size corresponding to Pdcd4 (arrowhead). Lane 1 contains recombinant Pdcd4. Lane 2 contains 293 HEK cells treated with TPA and MG132. The anti-Pdcd4 antibody was used at a 1: 5,000 dilution. Personal Communication. M Young & A Jansen, NCI, Bethesda, MD.

Images



Western Blotting

Image 3. Western Blot of Rabbit anti-PDCD antibody. Marker: Opal Pre-stained ladder . Lane 1: HEK293 lysate . Lane 2: HeLa Lysate . Lane 3: MCF-7 Lysate . Lane 4: Jurkat Lysate . Lane 5: A431 Lysate . Lane 6: Raji Lsyate . Lane 7: Ramos Lysate . Lane 8: NIH/3T3 Lysate . Load: 35 µg per lane. Primary antibody: PDCD antibody at 1:1,000 for 3hrs at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:30,000 for 60 min at RT. Blocking Buffer: 1% Casein-TTBS for 30 min at RT. Predicted/Observed size: 52 kDa for PDCD.

Please check the product details page for more images. Overall 8 images are available for ABIN129709.