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

PDCD4 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14001c

Product Information

Application	IHC-P-Leica, WB, E
Primary Accession	Q53EL6
Other Accession	Q9JID1, Q61823, NP_055271.2, NP_663314.1
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33836
Calculated MW	51735
Antigen Region	121-149

Additional Information

Gene ID	27250
Other Names	Programmed cell death protein 4, Neoplastic transformation inhibitor protein, Nuclear antigen H731-like, Protein 197/15a, PDCD4, H731
Target/Specificity	This PDCD4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 121-149 amino acids from the Central region of human PDCD4.
Dilution	IHC-P-Leica~~1:500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PDCD4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

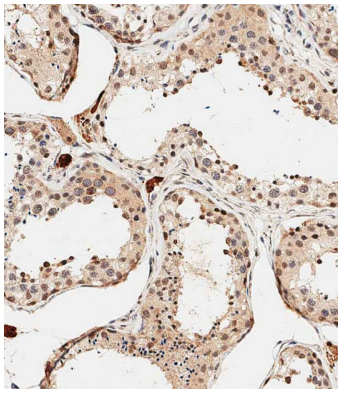
Background

This gene encodes a protein localized to the nucleus in proliferating cells. Expression of this gene is modulated by cytokines in natural killer and T cells. The gene product is thought to play a role in apoptosis but the specific role has not yet been determined. Two transcripts encoding different isoforms have been identified.

References

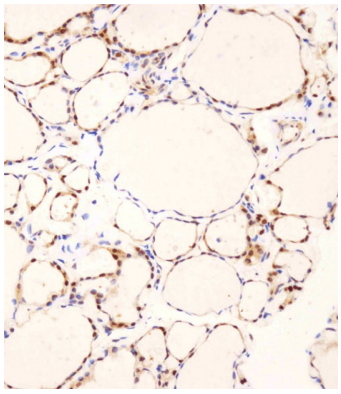
Hayashi, A., et al. Hum. Pathol. 41(11):1507-1515(2010)
Zhang, X., et al. Cancer Sci. 101(10):2163-2170(2010)
Wang, W., et al. Exp. Cell Res. 316(15):2456-2464(2010)
Santhanam, A.N., et al. Oncogene 29(27):3921-3932(2010)
Fassan, M., et al. Oncol. Rep. 24(1):135-139(2010)

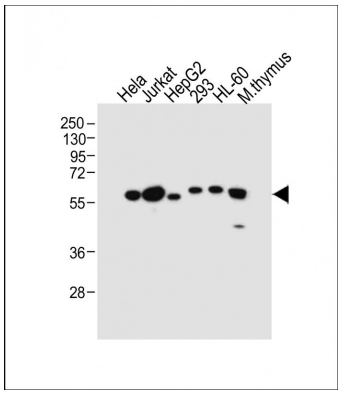
Images



Immunohistochemical analysis of AP14001C on paraffin-embedded human testis tissue was performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 15min at room temperature. Leica Bond Polymer Refine Detection was used as the secondary antibody.

Immunohistochemical analysis of AP14001C on paraffin-embedded human thyroid tissue was performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 15min at room temperature. Leica Bond Polymer Refine Detection was used as the secondary antibody.





All lanes : Anti-PDCD4 Antibody (Center) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: HepG2 whole cell lysate Lane 4: 293 whole cell lysate Lane 5: HL-60 whole cell lysate Lane 6: Mouse thymus tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 52 kDa Blocking/Dilution buffer: 5% NFDM/TBST.