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PDCD4 Rabbit pAb

Catalog # AP99226

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q53EL6
Other Accession	Q53EL6
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51735
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PDCD4
Epitope Specificity	1-100/469
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the PDCD4 family. Contains 2 MI domains.
SUBUNIT	Interacts (via MI domains) with EIF4A2 (By similarity). Interacts (via MI domains) with EIF4A1 (via N-terminal domain). Heterotrimer with EIF4A1; one molecule of PDCD4 binds two molecules of EIF4A1. Interacts with EIF4G1. May form a complex with EIF4A1 and EIF4G1. The interaction between PDCD4 and EIF4A1 interferes with the interaction between EIF4A1 and EIF4G. When phosphorylated, interacts with BTRC and FBXW11.
Post-translational modifications	Polyubiquitinated, leading to its proteasomal degradation. Rapidly degraded in response to mitogens. Phosphorylation of the phosphodegron promotes interaction with BTRC and proteasomal degradation.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene is a tumor suppressor and encodes a protein that binds to the eukaryotic translation initiation factor 4A1 and inhibits its function by preventing RNA binding. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2010]

Additional Information

Gene ID	27250
Other Names	H731; D19Ucla1; Ma3; Tis; Dug; PDCD4_HUMAN; PDCD4; Neoplastic transformation inhibitor protein; Nuclear antigen H731-like; Protein 197/15a; PDCD4_MOUSE; Protein MA-3; Topoisomerase-inhibitor suppressed protein; PDCD4_RAT; Death up-regulated gene protein; programmed cell death 4; programmed cell death 4 (neoplastic transformation inhibitor); nuclear antigen H731
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,Flow-Cyt=2ug/Test

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.