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DCAF12 Rabbit pAb

Catalog # AP97925

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q5T6F0
Other Accession	Q5T6F0
Predicted	Rat, Pig, Human, Mouse, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50517
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DCAF12/WDR40A
Epitope Specificity	231-330/453
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 WD repeat DCAF12 family. Contains 4 WD repeats.
SUBUNIT	Interacts with DDB1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	WD-repeats are motifs that are found in a variety of proteins and are characterized by a conserved core of 40-60 amino acids that commonly form a tertiary propeller structure. While proteins that contain WD-repeats participate in a wide range of cellular functions, they are generally involved in regulatory mechanisms concerning chromatin assembly, cell cycle control, signal transduction, RNA processing, apoptosis and vesicular trafficking. WDR40A (WD-repeat-containing protein 40A), also known as DDB1-CUL4-associated factor 12, is a 453 amino acid cytoplasmic protein that contains four WD-repeats. WDR40A is highly expressed in some cancer cell lines, lung cancer tissues and normal testis. A probable substrate receptor for CUL4-DDB1 E3 ubiquitin-protein ligase complex, WRD40A is suggested to interact with DDB1. WDR40A is encoded by a gene mapping to human chromosome 9p13.3. Human chromosome 9 houses over 900 genes and comprises nearly 4% of the human genome.

Additional Information

Gene ID	25853
Other Names	CT102; KIAA1892; TCC52; WDR40A; 1500001L20Rik; 5830424K06Rik; DCA12_HUMAN; DCAF12; Centrosome-related protein TCC52; Testis cancer centrosome-related protein; WD repeat-containing protein 40A; DCA12_MOUSE; DDB1 and CUL4 associated factor 12; WD repeat domain 40A; cancer/testis antigen 102
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000

	-10000
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	DCAF12 {ECO:0000303|PubMed:16949367, ECO:0000312|HGNC:HGNC:19911}
Function	Substrate-recognition component of a DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complex of the DesCEND (destruction via C-end degrons) pathway, which recognizes a C-degron located at the extreme C terminus of target proteins, leading to their ubiquitination and degradation (PubMed:16949367, PubMed:16964240, PubMed:29779948). The C- degron recognized by the DesCEND pathway is usually a motif of less than ten residues and can be present in full-length proteins, truncated proteins or proteolytically cleaved forms (PubMed:29779948). The DCX(DCAF12) complex specifically recognizes proteins with a diglutamate (Glu-Glu) at the C-terminus, such as MAGEA3, MAGEA6 and CCT5, leading to their ubiquitination and degradation (PubMed:29779948, PubMed:31267705). Ubiquitination of MAGEA3, MAGEA6 by DCX(DCAF12) complex is required for starvation-induced autophagy (PubMed:31267705). Also directly recognizes the C-terminal glutamate-leucine (Glu-Leu) degron as an alternative degron in proteins such as MOV10, leading to their ubiquitination and degradation. Controls the protein level of MOV10 during spermatogenesis and in T cells, especially after their activation (PubMed:34065512).
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus
Tissue Location	Highly expressed in lung cancer tissues and some cancer cell lines (PubMed:18957058). Restricted expression in normal testis (PubMed:18957058).

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