

CDCA7 Rabbit pAb

Catalog # AP98380

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9BWT1
Other Accession	Q9BWT1
Reactivity	Rat, Human, Mouse
Predicted	Pig, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42573
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CDCA7
Epitope Specificity	201-300/371
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	CDCA7 is a nuclear protein without a known function, although its high homology with the transcription factor JPO2 or RAM2 suggests that it is also a transcription factor. CDCA7 is one of many target genes regulated by the c-Myc transcription factor. Overexpression of CDCA7 occurs in a significant proportion of cancers and it may play an important role in tumorigenesis. Normally it is periodically expressed in the cell cycle, peaking at the G1 to S phase transition.

Additional Information

Gene ID	83879
Other Names	ICF3; JPO1; 2310021G01Rik; CDCA7_HUMAN; CDCA7; Protein JPO1; CDCA7_MOUSE; CDCA7_RAT; cell division cycle associated 7
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	CDCA7 (HGNC:14628)
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Synonyms	JPO1
Function	Participates in MYC-mediated cell transformation and apoptosis; induces anchorage-independent growth and clonogenicity in lymphoblastoid cells. Insufficient to induce tumorigenicity when overexpressed but contributes to MYC-mediated tumorigenesis (PubMed: 11598121 , PubMed: 15994934 , PubMed: 23166294). Also functions as a critical cofactor for the chromatin remodeler HELLS, facilitating its recruitment to specific genomic regions to maintain DNA methylation patterns and heterochromatin integrity. Recognizes hemimethylated CpG within nucleosomes where it recruits HELLS to remodel chromatin and facilitate access of de novo DNA methyltransferases to heterochromatic regions, enabling proper establishment of DNA methylation patterns (PubMed: 30307408 , PubMed: 39178260). May play a role as transcriptional regulator (PubMed: 16580749).
Cellular Location	Nucleus. Cytoplasm Chromosome. Note=Predominantly nuclear with some expression also seen in the cytoplasm. Predominantly cytoplasmic when phosphorylated at Thr-163
Tissue Location	Ubiquitous with higher level in thymus and small intestine. Overexpressed in a large number of tumors, in blood from patients with acute myelogenous leukemia (AML) and in chronic myelogenous leukemia (CML) blast crisis.

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