

CDCA2 Rabbit pAb

Catalog # AP96842

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q69YH5
Other Accession	Q69YH5
Reactivity	Human, Mouse
Predicted	Rat, Pig, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	112676
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CDCA2
Epitope Specificity	361-450/1023
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBUNIT	Interacts with PPP1CC.
Post-translational modifications	Phosphorylated by CDK1. May regulate its subcellular location.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	CDCA2 is a regulator of chromosome structure during mitosis. CDCA2 forms an essential complex with protein phosphatase PP1-gamma subunit 1 (PPP1CC) and is required for the recruitment of PP1 to chromatin. Knockdown of CDCA2 by RNAi causes large-scale cell death by apoptosis, as does overexpression of a dominant-negative mutant of the protein.

Additional Information

Gene ID	157313
Other Names	PPP1R81; Repo-Man; CDCA2_HUMAN; CDCA2; Recruits PP1 onto mitotic chromatin at anaphase protein (Repo-Man); cell division cycle associated 2; protein phosphatase 1, regulatory subunit 81
Dilution	WB=1:500-2000,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	CDCA2
Function	Regulator of chromosome structure during mitosis required for condensin-depleted chromosomes to retain their compact architecture through anaphase. Acts by mediating the recruitment of phosphatase PP1-gamma subunit (PPP1CC) to chromatin at anaphase and into the following interphase. At anaphase onset, its association with chromatin targets a pool of PPP1CC to dephosphorylate substrates.
Cellular Location	Nucleus. Note=Excluded from the nucleolus. Present in nucleoplasm throughout the G1, S and G2 stages of the cell cycle. During M phase, it becomes diffuse throughout the cell as the nuclear membrane breaks down, and faintly accumulates later on metaphase chromatin. As the cell progresses to anaphase, it accumulates on chromatin
Tissue Location	Ubiquitously expressed.

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