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

CINP Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59133

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9BW66
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24324

Additional Information

Gene ID	51550
Other Names	Cyclin-dependent kinase 2-interacting protein, CDK2-interacting protein, CINP
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:50-200,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	CINP {ECO:0000303|PubMed:19889979, ECO:0000312|HGNC:HGNC:23789}
Function	Component of the DNA replication complex, which interacts with two kinases, CDK2 and CDC7, thereby providing a functional and physical link between CDK2 and CDC7 during firing of the origins of replication (PubMed:16082200, PubMed:19889979). Regulates ATR-mediated checkpoint signaling in response to DNA damage (PubMed:16082200, PubMed:19889979). Part of the 55LCC heterohexameric ATPase complex which is chromatin-associated and promotes replisome proteostasis to maintain replication fork progression and genome stability. Required for replication fork progression, sister chromatid cohesion, and chromosome stability. The ATPase activity is specifically enhanced by replication fork DNA and is coupled to cysteine protease-dependent cleavage of replisome substrates in response to replication fork damage. Uses ATPase activity to process replisome substrates in S- phase, facilitating their proteolytic turnover from chromatin to ensure DNA replication and mitotic fidelity (PubMed:38554706). As part of 55LCC complex, also involved in the cytoplasmic maturation steps of pre-60S ribosomal particles by promoting the release of shuttling protein RSL24D1/RLP24 from the pre-ribosomal particles (PubMed:35354024).

Cellular Location	Nucleus. Note=Binds to nuclear under G1 conditions, and dissociates from chromatin with the start of DNA replication.

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