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

CCNH Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10940b

Product Information

Application	WB, FC, E
Primary Accession	P51946
Other Accession	Q4R7U4, NP_001230.1
Reactivity	Human
Predicted	Monkey, Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14888
Calculated MW	37643
Antigen Region	269-299

Additional Information

Gene ID	902
Other Names	Cyclin-H, MO15-associated protein, p34, p37, CCNH
Target/Specificity	This CCNH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 269-299 amino acids from the C-terminal region of human CCNH.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CCNH Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CCNH
Function	Component of the CDK-activating kinase (CAK) complex, a master regulator of CDK activity by catalyzing the activating threonine phosphorylation of CDKs (PubMed:41100585). Binds and activates cyclin- dependent protein kinase

CDK7, the catalytic subunit of CAK (PubMed:41100585). CAK activates major mediators of cell cycle control, including CDK1, CDK2, CDK4 and CDK6, and plays a key role in regulating cell cycle progression (PubMed:41100585). CAK complexed to the core- TFIIH basal transcription factor activates RNA polymerase II by serine phosphorylation of the repetitive C-terminal domain (CTD) of its large subunit (POLR2A), allowing its escape from the promoter and elongation of the transcripts (PubMed:7533895, PubMed:10024882). Involved in cell cycle control and in RNA transcription by RNA polymerase II (PubMed:7533895, PubMed:10024882). Its expression and activity are constant throughout the cell cycle.

Cellular Location Nucleus.

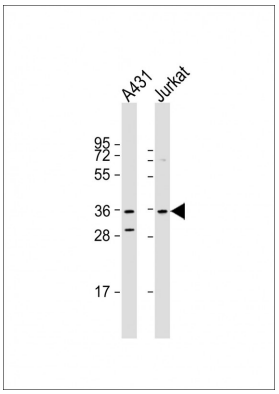
Background

The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin forms a complex with CDK7 kinase and ring finger protein MAT1. The kinase complex is able to phosphorylate CDK2 and CDC2 kinases, thus functions as a CDK-activating kinase (CAK). This cyclin and its kinase partner are components of TFIIH, as well as RNA polymerase II protein complexes. They participate in two different transcriptional regulation processes, suggesting an important link between basal transcription control and the cell cycle machinery. A pseudogene of this gene is found on chromosome 4. Alternate splicing results in multiple transcript variants.

References

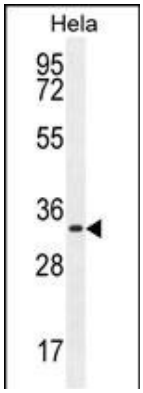
Guey, L.T., et al. Eur. Urol. 57(2):283-292(2010)
Hosgood, H.D. III, et al. Respir Med 103(12):1866-1870(2009)
Young, R.P., et al. Postgrad Med J 85(1008):515-524(2009)
Kweekel, D.M., et al. Br. J. Cancer 101(2):357-362(2009)
Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)

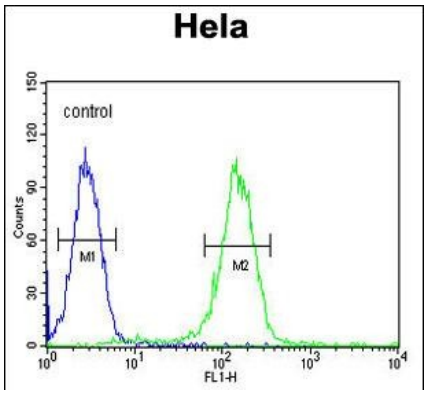
Images



All lanes : Anti-CCNH Antibody (C-term) at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

CCNH Antibody (C-term) (Cat. #AP10940b) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the CCNH antibody detected the CCNH protein (arrow).





CCNH Antibody (C-term) (Cat. #AP10940b) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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