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CCNH antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI16269

Product Information

Application	WB
Primary Accession	P51946
Other Accession	NM_001239, NP_001230
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Pig, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37643

Additional Information

Gene ID	902
Alias Symbol	CAK, p34, p37
Other Names	Cyclin-H, MO15-associated protein, p34, p37, CCNH
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-CCNH antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	CCNH antibody - middle region 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.

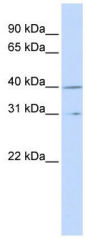
Background

Regulates CDK7, the catalytic subunit of the CDK- activating kinase (CAK) enzymatic complex. CAK activates the cyclin-associated kinases CDK1, CDK2, CDK4 and CDK6 by threonine phosphorylation. 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. Involved in cell cycle control and in RNA transcription by RNA polymerase II. Its expression and activity are constant throughout the cell cycle.

References

Maekelae T.P.,et al.Nature 371:254-257(1994).
Fisher R.P.,et al.Cell 78:713-724(1994).
Ebert L.,et al.Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases.
Shiekhattar R.,et al.Nature 374:283-287(1995).
Kershnar E.,et al.J. Biol. Chem. 273:34444-34453(1998).

Images



WB Suggested Anti-CCNH Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:1562500
Positive Control: MCF7 cell lysate

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