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Anti-Cyclin H Antibody (1H9-D3-E11)

Mouse Monoclonal Antibody
Catalog # ABV12051

Product Information

Application	WB, IP
Primary Accession	P51946
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG2b
Clone Names	1H9-D3-E11
Calculated MW	37643

Additional Information

Gene ID	902
Application & Usage	WB: Jurkat, K562 and A431 cell lysates; IP: HeLa cell lysates
Other Names	Cyclin-H, MO15-associated protein, p34, p37
Target/Specificity	Cyclin-H
Antibody Form	Liquid
Appearance	Colorless liquid
Formulation	In buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50%,glycerol
Handling	The antibody solution should be gently mixed before use.
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	Anti-Cyclin H Antibody (1H9-D3-E11) 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

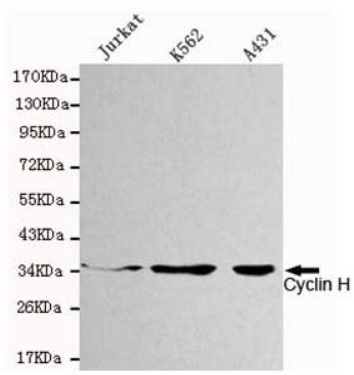
mediators of cell cycle control, including CDK1, CDK2, CDK4 and CDK6, and plays a key role in regulating cell cycle progression (PubMed:41100585). CAK complexed to the core- TFIIH basal transcription factor activates RNA polymerase II by serine phosphorylation of the repetitive C-terminal domain (CTD) 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.

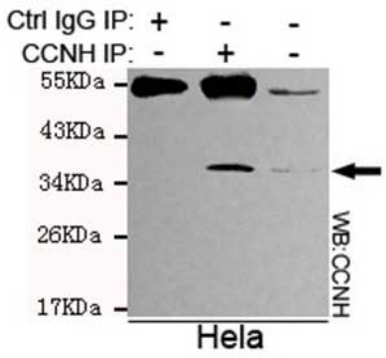
Background

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.

Images



Western blot detection of Cyciin H in JurKat, K562 and A431 cell lysates using Cyciin H mouse mAb



Immunoprecipitation analysis of HeLa cell lysates using Cyclin H mouse mAb