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

Recombinant Anti-Cyclin H Rabbit mAb

Catalog # AP94982

Product Information

Application	WB, IHC, FC, IP, IF/IC
Primary Accession	P51946
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Monoclonal
Calculated MW	37643

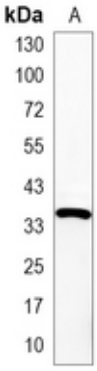
Additional Information

Gene ID	902
Other Names	Cyclin-H; MO15-associated protein; p34; p37
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human Cyclin H protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50 IP~~N/A IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

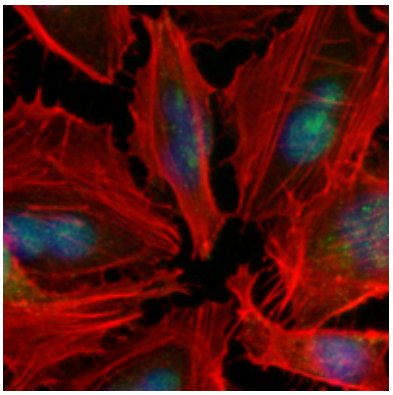
Protein Information

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.

Images



Western blot analysis of Cyclin H expression in HeLa (A) whole cell lysates. (Predicted band size: 38 kD; Observed band size: 38 kD)



Immunofluorescent analysis of Cyclin H staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).