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# Cyclin H Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52723

## Product Information

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|---|---|
| **Application** | WB, IP |
| **Primary Accession** | P51946 |
| **Reactivity** | Human |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype** | IgG2b |
| **Calculated MW** | 37643 |

## Additional Information

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|---|---|
| **Gene ID** | 902 |
| **Other Names** | 6330408H09Rik;AI661354;AV102684;AW538719;CAK;CAK complex subunit;ccnh;CCNH_HUMAN;CDK activating kinase;CDK activating kinase complex subunit;Cyclin dependent kinase activating kinase;cyclin dependent kinase activating kinase complex subunit;Cyclin H; CyclinH;MO15-associated protein;p34;p36;p37. |
| **Dilution** | WB~~1:1000 IP~~1:500 |
| **Format** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3. |
| **Storage** | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |

## Protein Information

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|---|---|
| **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.

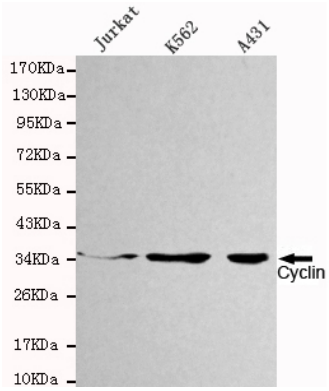
## Background

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.

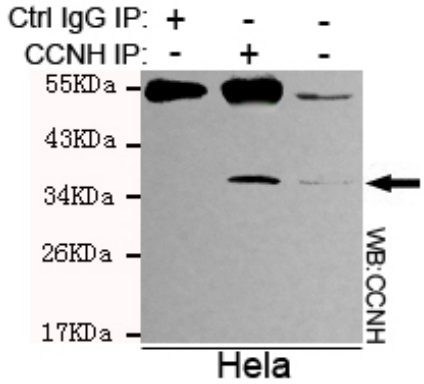
## References


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




Western blot detection of Cyclin H in Jurkat,K562 and A431 cell lysates using Cyclin H mouse mAb (1:1000 diluted).Predicted band size: 38KDa.Observed band size: 38KDa.




Immunoprecipitation analysis of Hela cell lysates using Cyclin H mouse mAb.


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