

Cyclin H Antibody

Catalog Number: E2200542

Size: 100ug Host: Mouse

Formulation: Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl)

with 0.2% sodium azide, 50%, glycerol

Sensitivity: This antibody detects endogenous levels of CCNH(N-term) and does not cross-react with

related proteins.

Entrez summary: 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.

UniPort summary

Function:

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-terminus 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.

Immunogen: Purified recombinant human CCNH(N-term) protein fragments expressed in E.coli.

Antibody Type: Monoclonal antibody

Isotype: IgG2b

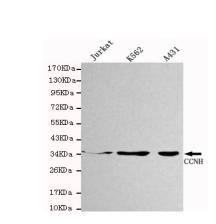
Purified method: Affinity purified

Subcellular location: Nucleus

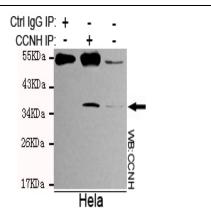
Reactivity: H
Applications: WB, IP
Molecular Weight: 38kDa
UniProt number: P51946

GeneBank ID: NM_001239.2 Gene symbol: CAK; p34; p37

Alternate names: MO15-associated protein p34 p37



Western blot detection of CCNH in Jurkat,K562&A431 cell lysates using CCNH antibody (1:1000 diluted). Predicted band size: 38KDa Observed band size: 38KDa.



Immunoprecipitation analysis of Hela cell lysates using CCNH antibody.