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| <b>Product name:</b>     | Cyclin H (phospho Thr315) Rabbit Polyclonal Antibody                                                                                           |
| <b>Cat number:</b>       | ABN04528                                                                                                                                       |
| <b>Conjugate:</b>        | Unconjugated                                                                                                                                   |
| <b>Size:</b>             | 100μL                                                                                                                                          |
| <b>Clone:</b>            | Polyclonal                                                                                                                                     |
| <b>Concentration:</b>    | 1mg/ml                                                                                                                                         |
| <b>Host:</b>             | Rabbit                                                                                                                                         |
| <b>Isotype:</b>          | IgG                                                                                                                                            |
| <b>Immunogen:</b>        | The antiserum was produced against synthesized peptide derived from human Cyclin H around the phosphorylation site of Thr315. AA range:274-323 |
| <b>Reactivity:</b>       | Human,Mouse,Rat                                                                                                                                |
| <b>Applications:</b>     | WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000                                                                         |
| <b>Molecular Weight:</b> | 34 36kDa                                                                                                                                       |
| <b>Purification:</b>     | Affinity purification                                                                                                                          |
| <b>Form:</b>             | Liquid                                                                                                                                         |
| <b>Buffer:</b>           | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.                                                             |
| <b>Storage:</b>          | Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.                                                   |

**Background:**

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 TFIIF, 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 function: Regulates CDK7, the catalytic subunit of the CDK-activating kinase (CAK) enzymatic complex. CAK activates the cyclin-associated kinases CDC2/CDK1, CDK2, CDK4 and CDK6 by threonine phosphorylation. CAK complexed to the core-TFIIF 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., similarity: Belongs to the cyclin family., similarity: Belongs to the cyclin family. Cyclin C subfamily., subunit: Associates primarily with CDK7 and MAT1 to form the CAK complex. CAK can further associate with the core-TFIIF to form the TFIIF basal transcription factor.,