

## 32-8379: Recombinant Human Cyclin-H/CCNH (N-6His)

**Gene :** CCNH  
**Gene ID :** 902  
**Uniprot ID :** P51946

### Description

Source: E.coli.  
MW :39.8kD.

Recombinant Human Cyclin-H is produced by our E.coli expression system and the target gene encoding Met1-Leu323 is expressed with a 6His tag at the N-terminus. Human CCNH, also known as Cyclin-H, MO15-associated protein, p34 and p37, is a protein which belongs to the highly conserved cyclin family. Cyclin family members are characterized by a dramatic periodicity in protein abundance through the cell cycle. 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. CCNH regulates CDK7 which is 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. CCNH is also involved in cell cycle control and in RNA transcription by RNA polymerase II. Its expression and activity are constant throughout the cell cycle.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of 20mM Tris, 100mM NaCl, 2mM EDTA, 2mM DTT, 30% Glycerol, pH 8.5.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHHSSGLVPRGSHMYHNSSQKRHWTFSSSEQLARLRADANRKFRC KAVANGKVL PNDPVFLEPH  
EEMTLCKYYEKRLLEFCSVFKPAMPRSVGTACMYFKRFLNNSVMEYHPRIIMLTCAFLACKVDEFNVSSPQFV  
GNLRESPLGQEKALEQILEYELLLIQQLNFHLIVHNPYRPFEGFLIDLKTRYPILENPEILRKTADDFLNRIALTDAYL  
LYTPSQIALTAILSSASRAGITMESYLSESLMLKENRTCLSQLLDIMKSMRNLVKKYEP RSEEVAVLKQKLERCH  
SAELALNVITKKRKG YEDDDYVSKKSKHEEEEWTD DDLVESL

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.