PRODUCT INFORMATION

Expression system E.coli

Domain 1-323aa

UniProt No. P51946

NCBI Accession No. NP_001230

Alternative Names

CCNH, CAK, p34, p37, 6330408H09Rik, Al661354, AV102684, AW538719, CDK activating kinase, Cyclin dependent kinase activating kinase, Cyclin H, CyclinH, M015 associated protein, P36, Cyclin-H

PRODUCT SPECIFICATION

Molecular Weight

39.8 kDa (343aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 30% glycerol, 2mM EDTA, 0.1M NaCl

Purity

> 90% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Cyclin H, also known as CDK7, is a member of the cyclin-dependent protein kinase 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. Cyclin H forms a trimeric complex with cyclin H and MAT1, which functions as a CDK-activating kinase (CAK). Cyclin H is an essential component of the



transcription factor TFIIH that is involved in transcription initiation and DNA repair. Recombinant human Cyclin H, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MYHNSSQKRH WTFSSEEQLA RLRADANRKF RCKAVANGKV LPNDPVFLEP HEEMTLCKYY EKRLLEFCSV FKPAMPRSVV GTACMYFKRF YLNNSVMEYH PRIIMLTCAF LACKVDEFNV SSPQFVGNLR ESPLGQEKAL EQILEYELLL IQQLNFHLIV HNPYRPFEGF LIDLKTRYPI LENPEILRKT ADDFLNRIAL TDAYLLYTPS QIALTAILSS ASRAGITMES YLSESLMLKE NRTCLSQLLD IMKSMRNLVK KYEPPRSEEV AVLKQKLERC HSAELALNVI TKKRKGYEDD DYVSKKSKHE EEEWTDDDLV ESL

General References

Schneider, E., et al. (1998) Oncogene. 17(21):2733-41. Yee A., et al. (1995) Canser Res. 55(24):6058-62.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.