

Recombinant Human CDK13&Cyclin K Protein

Catalog No.: RP03305LQ **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	8621&8812	Q14004&O75909

Tags

N-GST (CDK13) & N-Flag (Cyclin K)

Synonyms

CDK13; CDC2L; CDC2L5; CHED;
KIAA1791; Cyclin-dependent kinase 13;
Cyclin K; CCNK; CPR4; Cyclin-K

Product Information

Source	Purification
Baculovirus-Insect Cells	> 90% by SDS-PAGE and HPLC

Calculated MW	Observed MW
71.0 kDa/36.9 kDa	60-70 kDa/30-40 kDa

Endotoxin

< 1.0 EU/μg of the protein by LAL method

Formulation

Supplied as a 0.22 μm filtered solution in 20 mM HEPES, 200 mM NaCl, 5% glycerol, 1 mM DTT. (pH 7.5). Contact us for customized product form or formulation.

Reconstitution

Please use running water to thaw it quickly.

Contact

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Background

CDK13 also known as cyclin dependent kinase 13 is a member of the cyclin-dependent serine/threonine protein kinase family. It contains a C-terminal extension helix composed of a polybasic cluster and a DCHEL motif that interacts with the bound ATP. Cyclin K has been shown to interact with multiple CDKs including CDK9 and latest CDK12 and CDK13. Roles include helping to phosphorylate C-terminal domains of subunits of RNAP2. CDK13/Cyclin K as the latest members of RNA polymerase II (RNA Pol II) C-terminal domain (CTD) kinases phosphorylates both Ser5 and Ser2 of the RNA Pol II CTD with a preference for Ser7 pre-phosphorylations at a C-terminal position.

Basic Information

Description

Recombinant Human CDK13&Cyclin K Protein is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Gln673-Ser1054 (CDK13) & Met1-Ser300 (Cyclin K)) of Human CDK13&CCNK (Accession #Q14004&O75909) fused with a N-GST (CDK13) & N-Flag (Cyclin K) tag.

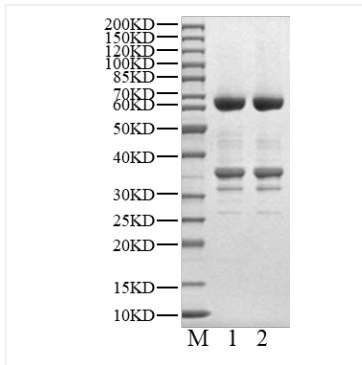
Bio-Activity

The activity of CDK13/Cyclin K is based on the MSA technology, and the content and ratio of the substrate and the product are directly separated and detected in real time and dynamically by the different migration rates of the substrate and the product after the enzymatic reaction.

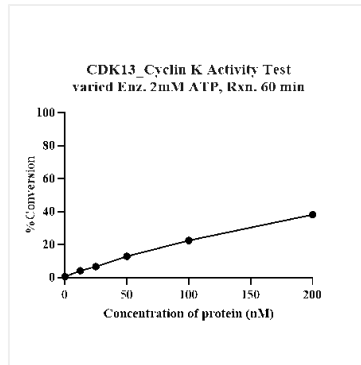
Storage

Store at -70°C. This product is stable at ≤ -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature. Aliquots below 10 μL are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Human CDK13&Cyclin K Protein was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



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