3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Cyclin K, GST-tagged, human recombinant, expressed in *Sf*9 cells

Catalog Number **SRP5344**
Storage Temperature –70 °C

Synonyms: CCNK, CPR4, MGC9113

Product Description

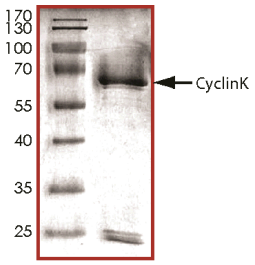
Cyclin K is a member of the cyclin family, which can regulate transcription through the association with and activation of cyclin-dependent kinases (CDK). The CDK/Cyclin K complex can phosphorylate the C-terminal domain (CTD) of the large subunit of RNA polymerase II.[1] Cyclin K is associated with potent CTD kinase and CDK kinase activities *in vitro* and coimmunoprecipitates with POLR2A. Cyclin K is a new member of the transcription cyclin family, which may play a dual role in regulating CDK and RNA polymerase II activities.[2]

Recombinant full-length human Cyclin K was expressed by baculovirus in *Sf*9 insect cells using an N-terminal GST-tag. The gene accession number is BC015935. It is supplied in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~67 kDa

The enzymatic activity of this product has not been determined.

Figure 1.
SDS-PAGE Gel of Typical Lot:
≥70% (SDS-PAGE, densitometry)



Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at –70 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

References

1. Edwards, M.C. et al., Human cyclin K, a novel RNA polymerase II-associated cyclin possessing both carboxy-terminal domain kinase and Cdk-activating kinase activity. Molec. Cell. Biol., **18**, 4291-4300 (1998).
2. Lin, X., P-TEFb containing cyclin K and Cdk9 can activate transcription via RNA. J. Biol. Chem., **277**(19), 16873-8 (2002).

RC,MAM 10/12-1