

# Recombinant Human CDK9&Cyclin T1 Protein

Catalog No.: RP03320LQ Recombinant

# **Sequence Information**

 Species
 Gene ID
 Swiss Prot

 Human
 1025&904
 P50750&060

 563
 563

**Tags** 

N-GST (CDK9) & N-His (Cyclin T1)

**Synonyms** 

CDK9; CDC2L4; TAK; Cyclin-dependent kinase 9; Cyclin T1; CCNT1; Cyclin-T1

# **Product Information**

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

Calculated MW Observed MW 69.3 kDa/33.1 kDa 60-70 kDa/25-35 kDa

#### **Endotoxin**

 $< 1.0 \; \text{EU/}\mu\text{g}$  of the protein by LAL method

#### **Formulation**

Supplied as a 0.22  $\mu$ m filtered solution in 50 mM HEPES, 300 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**

CDK9 also known as cyclin-dependent kinase 9 is a member of the Ser/Thr protein kinase family. It was found to be a component of the multiprotein complex TAK/P-TEFb, which is an elongation factor for RNA polymerase II-directed transcription and functions by phosphorylating the C-terminal domain of the largest subunit of RNA polymerase II. CDK9 forms a complex with and is regulated by its regulatory subunit cyclin T or cyclin K. And HIV-1 Tat protein was found to interact with the CDK9/cyclin T complex, which suggested a possible involvement in AIDS. CDK9 is also known to associate with other proteins such as TRAF2, and be involved in differentiation of skeletal muscle.

## **Basic Information**

#### Description

Recombinant Human CDK9&Cyclin T1 Protein is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Met1-Phe372 (CDK9) & Met1-Lys726 (Cyclin T1)) of Human CDK9&CCNT1 (Accession #P50750&O60563) fused with a N-GST (CDK9) & N-His (Cyclin T1) tag.

#### **Bio-Activity**

The activity of CDK9/Cyclin T1 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.

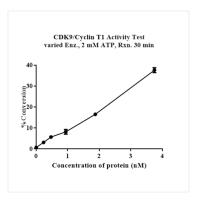
## Storage

Store at -70°C. This product is stable at  $\leq$  -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  $\mu$ L are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.



Recombinant Human CDK9&Cyclin T1 Protein was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



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