

# Recombinant Human CDK18&Cyclin Y Protein

Catalog No.: RP03308LQ **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	5129&21977	Q07002&Q81ND76

### Tags

N-GST (CDK18) & N-Flag (Cyclin Y)

### Synonyms

CDK18; PCTAIRE3; PCTK3; Cyclin-dependent kinase 18; Cyclin Y; CCNY; C10orf9; CBCP1; CFP1; Cyclin-Y

## Product Information

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

Calculated MW	Observed MW
81.0 kDa/41.3 kDa	60-85 kDa/25-40 kDa

### Endotoxin

< 1.0 EU/μg of the protein by LAL method

### Formulation

Supplied as a 0.22 μm filtered solution in 50 mM HEPES, 150 mM NaCl, 5% glycerol. (pH 7.5). Contact us for customized product form or formulation.

### Reconstitution

Please use running water to thaw it quickly.

## Contact

 | 400-999-6126

 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)

 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Background

CDK18 belongs to the PCTAIRE family of CDKs, which include human CDK16, CDK17 and CDK18, all of which share a conserved PCTAIRE amino acid sequence in the helical α-C region of the kinase N-lobe. In mature tissues and cell lines, CDK18 predominantly localizes in the cytoplasm and at the plasma membrane, and it was shown to interact with cyclin A2 and displayed kinase activity, which is further controlled by PKA through Ser12 phosphorylation. CDK18 was first described as a neuronal kinase that phosphorylates TAU protein when overexpressed in human brain. It has multifaceted functions in human cancer and can act either as oncogene or as tumor suppressor, depending on the specific tumor type and context.

## Basic Information

### Description

Recombinant Human CDK18&Cyclin Y Protein is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Met1-Phe474 (CDK18) & Met1-Ser341 (Cyclin Y)) of Human CDK18&CCNY (Accession #Q07002&Q8ND76) fused with a N-GST (CDK18) & N-Flag (Cyclin Y) tag.

### Bio-Activity

The activity of CDK18/Cyclin Y 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

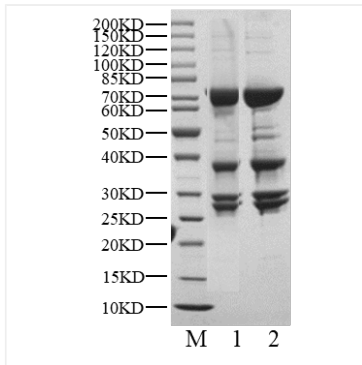
Store at -70°C. This product is stable at ≤ -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.

Aliquots below 10 μL are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles.

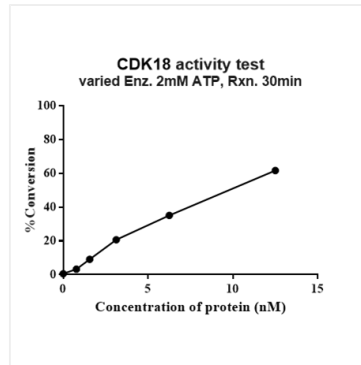
Avoid repeated freeze/thaw cycles.

## Validation Data

---



Recombinant Human CDK18&Cyclin Y Protein was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



The activity of CDK18/Cyclin Y 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.